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60TH CONGRESS : : 2D SESSION

DECEMBER 7, 1908—MARCH 4, 1909

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OF AGRICULTURE

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- No.
1221. Expenditures of Agriculture Department, 1908, etc.
1271. Expenditures of Forest Service, 1908, etc.

III

DEPARTMENT OF AGRICULTURE

COMBINED REPORT OF

EXPENDITURES DURING THE FISCAL YEAR 1908

APPROPRIATIONS FOR THE FISCAL YEAR 1909

AND

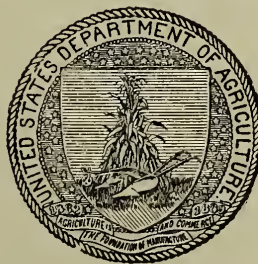
EXPENDITURES PROPOSED FOR THE FISCAL YEAR 1910

AS REQUIRED BY 34 STATUTES, PAGE 1282

PREPARED UNDER THE DIRECTION OF THE SECRETARY OF AGRICULTURE

By A. ZAPPONE

CHIEF OF THE DIVISION OF ACCOUNTS AND DISBURSEMENTS



DECEMBER 15, 1908.—Referred to the Committee on Agriculture
and ordered to be printed

WASHINGTON
GOVERNMENT PRINTING OFFICE

1909

LETTER OF TRANSMITTAL.

DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, December 14, 1908.

SIR: As required by 34 Statutes, page 1282, I have the honor to transmit herewith classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908, to which, for purposes of ready comparison, has been added in parallel columns a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909.

As the Forest Service is specifically required to render this report (34 Stats., p. 1270), the report for that bureau has not been included in the attached general report, but will be submitted separately later.

A copy of this report has also been transmitted to the President of the Senate.

Very respectfully,

JAMES WILSON,
Secretary.

To the SPEAKER OF THE HOUSE OF REPRESENTATIVES.

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NOTE.—The report for the Forest Service has not been included herein, but will be submitted separately as required by 34 Statutes, page 1270.

EXPENDITURES, 1908, APPROPRIATIONS, 1909, AND ESTIMATES, 1910, DEPARTMENT OF AGRICULTURE.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909.

OFFICE OF THE SECRETARY.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Office of the Secretary, 1908, \$119,200.</i>	<i>Salaries, Office of the Secretary, 1909, \$132,900.</i>	<i>Salaries, Office of the Secretary, 1910, \$162,300.</i>
Wilson, James..... Secretary of Agriculture, at \$12,000.....	Secretary of Agriculture..... \$12,000.00	Secretary of Agriculture..... \$12,000.00
Hays, W. M..... Assistant Secretary of Agriculture, at \$5,000.....	Assistant Secretary of Agriculture.. 5,000.00	Assistant Secretary of Agriculture.. 5,000.00
Burch, S. R..... Chief clerk, at \$2,500.....	1 solicitor..... 4,000.00	Chief clerk, \$2,500, and \$500 additional as custodian of buildings... 3,000.00
McCabe, George P..... Solicitor, at \$3,500.....	Private secretary to the Secretary of Agriculture..... 2,500.00	Private secretary to the Secretary of Agriculture..... 2,500.00
Wilson, Jasper..... Private Secretary to Secretary of Agriculture, at \$2,500.....	Stenographer and executive clerk to the Secretary of Agriculture..... 2,000.00	Stenographer and executive clerk to the Secretary of Agriculture..... 2,000.00
Reese, R. M..... Stenographer and executive clerk, at \$2,000.....	Private secretary to the Assistant Secretary of Agriculture..... 1,600.00	Private secretary to the Assistant Secretary of Agriculture..... 1,600.00
Reynolds, F. A..... Stenographer to Assistant Secretary, at \$1,400.....	Stenographer to the Assistant Secretary of Agriculture..... 1,400.00	Stenographer to the Assistant Secretary of Agriculture..... 1,400.00
Mowry, H. H..... Private secretary to Assistant Secretary, at \$1,600.....	1 appointment clerk..... 2,000.00	1 appointment clerk..... 2,000.00
Bennett, J. B..... Appointment clerk, at \$2,000.....	1 chief of supply division..... 2,000.00	1 chief of supply division..... 2,000.00
Lower, C. B..... Chief, supply division, at \$2,000.....	1 inspector..... 2,000.00	1 inspector..... 2,000.00
Guthridge, A. G..... Telegraph and telephone operator, at \$1,400.....	1 telegraph and telephone operator.. 1,400.00	1 telegraph and telephone operator.. 1,400.00
Daly, H. J..... Telegraph and telephone operator, at \$1,200.....	1 clerk, class four..... 1,800.00	NOTE.—One telegraph and telephone operator, at \$1,200, dropped.
Ashley, Alex McC..... Inspector, at \$2,000.....	3 clerks, class three..... 4,800.00	3 clerks, class four (increase of 2 submitted)..... 5,400.00
Roberts, R. W..... Clerk, class four..... 1,800.00	5 clerks, class two..... 7,000.00	3 clerks, class three..... 4,800.00
Frickey, Irving..... Clerk, class three..... 1,600.00	7 clerks, class one..... 8,400.00	8 clerks, class two (increase of 3 submitted)..... 11,200.00
Pennybacker, I. S..... Clerk, class three..... 1,600.00	5 clerks, at \$1,000 each..... 5,000.00	8 clerks, class one (increase of 1 submitted)..... 9,600.00
Wyatt, W. C..... Clerk, class three..... 1,600.00	2 clerks, at \$900 each..... 1,800.00	8 clerks, at \$1,000 each (increase of 3 submitted)..... 8,000.00
Berryhill, Miriam B..... Clerk, class two..... 933.33	1 clerk..... 840.00	4 clerks, at \$900 each (increase of 2 submitted)..... 3,600.00
Eaton, L. B..... Clerk, class two..... 280.00	6 clerks or laborers, at \$720 each... 4,320.00	1 clerk..... 840.00
Wilbite, C. O..... Clerk, class two..... 711.67	1 chief engineer, who shall be captain of the watch..... 1,600.00	6 clerks or laborers, at \$720 each... 4,320.00
Burr, M. Helen..... Clerk, class two..... 688.34	1 assistant engineer..... 1,400.00	1 chief engineer, who shall be captain of the watch..... 1,600.00
Moore, S. O..... Clerk, class two..... 1,400.00	2 assistant engineers, at \$1,000 each. 2,000.00	1 assistant engineer..... 1,400.00
Brown, Grace S..... Clerk, class one..... 626.57	4 firemen, at \$720 each..... 2,880.00	2 assistant engineers, at \$1,000 each. 2,000.00
Moore, Felix T..... Clerk, class one..... 550.00	4 elevator conductors, at \$720 each.. 2,880.00	4 firemen, at \$720 each..... 2,880.00
Clark, C. B..... Clerk, class one..... 1,200.00	1 cabinetmaker..... 1,100.00	4 elevator conductors, at \$720 each.. 2,880.00
Griffith, T. E..... Clerk, class one..... 1,200.00	1 carpenter..... 1,000.00	1 cabinetmaker..... 1,100.00
Green, Lawrence H..... Clerk, class one..... 460.00	1 electrician..... 1,000.00	1 carpenter..... 1,000.00
Pearce, Edw. W..... Clerk, class one..... 650.00	1 painter..... 900.00	1 electrician..... 1,000.00
Haley, Joseph..... Clerk, class one..... 1,200.00	1 painter..... 720.00	1 painter..... 900.00
Hiatt, Frank H..... Clerk, class one..... 1,200.00	1 plumber..... 900.00	1 plumber..... 900.00
Ray, Thomas J..... Clerk, class one..... 1,200.00	1 blacksmith..... 840.00	1 blacksmith..... 840.00
Hines, Paul A..... Clerk, at \$1,000..... 1,000.00	15 watchmen, at \$720 each..... 10,800.00	1 lieutenant of the watch..... 1,000.00
Timberlake, W. F..... Clerk, at \$1,000..... 1,000.00	1 mechanic..... 1,100.00	27 watchmen, at \$720 each (increase of 12 submitted)..... 19,440.00
Breedin, Louise..... Clerk at \$900..... 900.00	7 clerks or messengers, at \$840 each. 5,880.00	2 mechanics, at \$1,200 each (submitted)..... 2,400.00
Daniels, Milton R..... Clerk, at \$840..... 438.67	2 assistant messengers, at \$720 each. 1,440.00	1 mechanic..... 1,100.00
Polton, Emma R..... Clerk, at \$720..... 390.00	2 assistant messengers, at \$600 each. 1,200.00	11 clerks or messengers, at \$840 each (increase of 4 submitted)..... 9,240.00
Arnold, Mabel..... Clerk, at \$720..... 390.00	1 assistant messenger..... 480.00	2 assistant messengers, at \$720 each. 1,440.00
Barksdale, Susie P..... Clerk, at \$720..... 376.00	1 skilled laborer..... 840.00	2 assistant messengers, at \$600 each. 1,200.00
Connor, J. A..... Clerk, at \$720..... 310.00	1 skilled laborer..... 720.00	1 assistant messenger..... 480.00
Daniels, Milton R..... Clerk, at \$720..... 310.00	3 skilled laborers, at \$600 each..... 1,800.00	1 skilled laborer..... 840.00
Bechtold, John M..... Clerk, at \$720..... 310.00	1 skilled laborer..... 480.00	1 skilled laborer..... 720.00
Gladmon, Percy L..... Clerk, at \$720..... 354.00	1 laborer..... 600.00	3 skilled laborers, at \$600 each..... 1,800.00
Taylor, A. Robena..... Clerk, at \$720..... 330.00	11 laborers or charwomen, at \$480 each..... 5,280.00	1 skilled laborer..... 480.00
Hicks, Jennie M..... Clerk, at \$720..... 390.00	1 charwoman..... 540.00	5 laborers, at \$600 each (increase of 4 submitted)..... 3,000.00
Morgan, R. H..... Clerk, at \$720..... 720.00	5 charwomen, at \$240 each..... 1,200.00	11 laborers or charwomen, at \$480 each..... 5,280.00
Rapier, J. H..... Clerk, at \$720..... 720.00	For extra laborers and emergency employments..... 7,600.00	1 charwoman..... 540.00
Williams, F. S..... Chief engineer, at \$1,600..... 1,600.00		5 charwomen, at \$240 each..... 1,200.00
Jones, Lewis..... Fireman, at \$900..... 900.00		For extra laborers and emergency employments..... 7,600.00
McGregor, John M..... Assistant fireman, at \$720..... 720.00		
Dahler, A. L..... Assistant fireman, at \$720..... 362.00		
Harris, Mordca..... Assistant fireman, at \$720..... 10.00		
Luckett, Thomas H..... Assistant fireman, at \$720..... 22.00		
Ross, William H..... Assistant fireman, at \$720..... 240.00		
Tavener, P. R..... Assistant fireman, at \$720..... 90.00		
Massie, Henry..... Assistant fireman, at \$720..... 630.00		
Sprague, Frank..... Assistant fireman, at \$720..... 181.67		
Guy, William..... Assistant fireman, at \$600..... 21.67		
Johnson, William..... Carpenter, at \$1,000..... 1,000.00		
Williams, J. Sherman..... Electrician, at \$1,000..... 1,000.00		
Halley, James..... Painter, at \$900..... 900.00		
Augusterfer, Raymond..... Plumber, at \$900..... 900.00		
Carter, George A..... Blacksmith, at \$840..... 270.67		
Harvey, Charles D..... Lieutenant of watch, at \$1,000..... 1,000.00		
Faurot, William B..... Watchman, at \$720..... 720.00		
Weidman, Charles S..... Watchman, at \$720..... 660.00		
Cooke, R. H..... Watchman, at \$720..... 720.00		
Arnold, Richard H..... Watchman, at \$720..... 720.00		
Bean, Clarence..... Watchman, at \$720..... 720.00		
Boardman, J. M..... Watchman, at \$720..... 720.00		
Byrnes, D. J..... Watchman, at \$720..... 720.00		
	Total amount of appropriation (an increase over 1908 of \$13,700)..... 132,900.00	Total amount estimated (an apparent increase over 1909 of \$29,400)..... 162,300.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of the Secretary—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Office of the Secretary, 1903, \$119,200—Continued.</i>	<i>Salaries, Office of the Secretary, 1909, \$132,900—Continued.</i>	<i>Salaries, Office of the Secretary, 1910, \$162,900—Continued.</i>
Croghan, C. J.....	Watchman, at \$720.....	\$600.00
Sprague, Frank.....		90.00
Emmons, Wales.....		112.00
Ryon, M. F.....	Watchman, at \$720.....	558.00
Fairfax, Thad.....	Watchman, at \$720.....	720.00
Gordon, James H.....	Watchman, at \$720.....	720.00
Hall, George I.....	Watchman, at \$720.....	720.00
Kite, Asa H.....	Watchman, at \$720.....	720.00
Moor, William H.....		680.00
Sill, Harry A.....	Watchman, at \$720.....	30.00
Mott, H. S.....		558.00
Sill, Harry A.....	Watchman, at \$720.....	162.00
Morton, Emery C.....	Watchman, at \$720.....	720.00
Ridgeway, B. T.....	Watchman, at \$720.....	720.00
Rutledge, Thomas.....	Watchman, at \$720.....	720.00
Kendrick, H. M.....	Mechanic, at \$1,000.....	1,100.00
Brooks, A. H.....	Messenger, at \$840.....	840.00
Daniels, Milton R.....		33.67
Gaskins, John H.....	Messenger, at \$840.....	718.67
Harrison, Floyd R.....		81.67
Hager, Peter.....	Messenger, at \$840.....	840.00
Mason, J. A.....	Messenger, at \$840.....	840.00
Phipps, William H.....	Messenger, at \$840.....	840.00
Williams, Joseph.....	Messenger, at \$840.....	840.00
Winfield, A. M.....	Messenger, at \$840.....	840.00
Harrison, Floyd R.....	Assistant messenger, at \$720.....	240.00
Tompkins, Robert R.....		480.00
Laborers and charwomen:		
Hawkins, Alfred.....	Assistant messenger, at \$720.....	720.00
Skidmore, Jared F.....	Skilled laborer, at \$840.....	840.00
Richards, William H.....	Skilled laborer, at \$720.....	720.00
Grau, E. G.....	Skilled laborer, at \$600.....	647.17
Carter, W. H.....	Skilled laborer, at \$600.....	600.00
Graser, S. O.....	Skilled laborer, at \$600.....	525.00
Kirksey, William.....	Skilled laborer, at \$600.....	50.00
Smith, C. L.....	Skilled laborer, at \$600.....	600.00
Schwab, Alvin R.....	Skilled laborer, at \$480.....	320.00
Wilson, John J.....		134.67
Bechtold, John M.....	Assistant messenger, at 600.....	258.33
Campbell, W. S.....		341.67
Brooks, Charles H.....	Assistant messenger, at \$600.....	600.00
Groesbeck, Daniel V. H.....	Assistant messenger, at \$600.....	378.33
Schwab, Alvin R.....		200.00
Fagan, Geo. M.....	Assistant messenger, at \$480.....	425.33
Priest, John G.....		30.67
Truxell, J. M.....	Laborer, at \$600.....	600.00
Phillips, O. A.....	Painter, at \$720.....	720.00
Anthony, Maria.....	Laborer, at \$480.....	480.00
Barrett, Martha.....	Laborer, at \$480.....	480.00
Bennett, Alden L.....	Laborer, at \$480.....	40.00
Hill, William.....	Laborer, at \$480.....	300.00
Cook, Ida A.....	Laborer, at \$480.....	480.00
Kelly, Mary.....	Laborer, at \$480.....	120.00
Martin, Mary E.....	Laborer, at \$480.....	300.00
Marshall, Luler.....	Laborer, at \$480.....	480.00
Meek, Belle.....	Laborer, at \$480.....	480.00
Mozee, Willena.....	Laborer, at \$480.....	480.00
O'Rourke, Estelle L.....	Laborer, at \$480.....	480.00
Perkins, Virginia.....	Laborer, at \$480.....	480.00
Syphax, C.....	Laborer, at \$480.....	480.00
Boss, Martha.....	Charwoman, at \$540.....	540.00
Cross, M. C.....		20.00
Garner, Hosannah.....	Charwoman, at \$240.....	40.00
Kelly, Mary.....		180.00
Johnson, Mary.....	Charwoman, at \$240.....	220.00
Lewis, Elizabeth A.....		16.66
Loftin, Ella.....	Charwoman, at \$240.....	192.00
Meredith, Ethel.....		11.33
Lawson, Henrietta V.....		147.33
North, Nannie.....	Charwoman, at \$240.....	20.00
White, Mary T.....		53.33
Shannon, Clara.....	Charwoman, at \$240.....	240.00
Extra laborers, emergency employments, and pay of rents, \$7,600:		
Allison, J. H.....	Unskilled laborer, at \$1.50 per diem.....	10.50
Boss, Edward.....	Unskilled laborer, at \$1.50 per diem.....	10.50
Boss, Robt. A.....	Unskilled laborer, at \$1.50 per diem.....	28.50
Budd, Celik.....	Unskilled laborer, at \$1.50 per diem.....	6.00
Butler, Charles J.....	Unskilled laborer, at \$1.50 per diem.....	57.00
Chapman, James E.....	Unskilled laborer, at \$1.50 per diem.....	123.00
Cleveland, Norman.....	Unskilled laborer, at \$1.50 per diem.....	36.75
Embrey, Oscar M.....	Unskilled laborer, at \$1.50 per diem.....	30.00
Gardner, George M.....	Unskilled laborer, at \$1.50 per diem.....	24.00
Gateley, James E.....	Unskilled laborer, at \$1.50 per diem.....	4.50
Herrell, Frank A.....	Unskilled laborer, at \$1.50 per diem.....	39.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of the Secretary—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Office of the Secretary, 1908, \$119,200—Continued.</i>	<i>Salaries, Office of the Secretary, 1909, \$132,900—Continued.</i>	<i>Salaries, Office of the Secretary, 1910, \$162,300—Continued.</i>
Extra laborers, emergency employments, and pay of rents, \$7,600—Continued.		
Johnson, James A..... Unskilled laborer, at \$1.50 per diem. \$34.50		
Kendall, M. F..... Unskilled laborer, at \$1.50 per diem. 15.00		
Myers, Stanton E..... Unskilled laborer, at \$1.50 per diem. 57.00		
O'Connor, John J..... Unskilled laborer, at \$1.50 per diem. 37.50		
Powell, Clifton W..... Unskilled laborer, at \$1.50 per diem. 39.00		
Stewart, William H..... Unskilled laborer, at \$1.50 per diem. 82.50		
Smoot, William B..... Unskilled laborer, at \$1.50 per diem. 123.00		
Toulson, Charles H..... Unskilled laborer, at \$1.50 per diem. 82.50		
Trunnel, Ashley..... Unskilled laborer, at \$1.50 per diem. 39.00		
Barnes, Charley L..... Unskilled laborer, at \$240 and \$480. 300.00		
Burton, John..... Unskilled laborer, at \$50 per month. 550.00		
Fitzhugh, William H.... Unskilled laborer, at \$50 per month. 325.00		
Joyce, John V..... Unskilled laborer, at \$50 per month. 335.00		
Madigan, Thomas..... Unskilled laborer, at \$50 per month. 350.00		
Rouser, Charles E..... Unskilled laborer, at \$60 per month. 720.00		
Morgan, R. H..... Laborer and clerk, at \$720. 330.00		
Rozzelle, Keith K..... Assistant messenger, at \$1.50 per diem. 37.50		
Brez, Colman..... Mechanic, at \$900. 225.00		
Barghausen, John F..... Carpenter and cabinetmaker, at \$1,100. 1,100.00		
Sands, John K..... Plumber, at \$4 per diem. 208.00		
Chew, Harry I..... Machinist, at \$4 per diem. 100.00		
Webb, John E..... Electrician helper, at \$50 per month. 188.33		
Fowler, Arthur W..... Electrician helper, at \$3 per diem. 108.00		
Carberry, Thomas F..... Electric wireman, at \$3 per diem and \$75 per month. 832.50		
Fenton, Lee..... Electric wireman, at \$4 per diem. 404.00		
Halloran, Charles E..... Electrician, at \$900. 37.50		
Verbeck, Clyde..... Special agent, at \$4 per diem. 100.00		
Tyrrell, Edward..... Temporary special inspector, at \$7.70 per diem. 161.70		
Total for salaries..... 117,919.36		
Rent..... 300.00		
Total..... 118,219.36		
Unexpended balance..... 980.64		
Total of appropriation..... 119,200.00		
The above force performed the following duties:	The above force is performing the following duties:	The above force will perform the following duties:
Administrative and executive:	Administrative and executive:	Administrative and executive:
Secretary of Agriculture..... \$12,000.00	Secretary of Agriculture..... \$12,000.00	Secretary of Agriculture..... \$12,000.00
Assistant Secretary of Agriculture..... 5,000.00	Assistant Secretary of Agriculture..... 5,000.00	Assistant Secretary of Agriculture..... 5,000.00
Chief clerk..... 2,500.00	Chief clerk, and custodian of buildings..... 3,000.00	Chief clerk, and custodian of buildings..... 3,000.00
Private secretary to the Secretary of Agriculture..... 2,500.00	Private secretary to the Secretary of Agriculture..... 2,500.00	Private Secretary to the Secretary of Agriculture..... 2,500.00
Private secretary to the Assistant Secretary of Agriculture..... 1,600.00	Private secretary to the Assistant Secretary of Agriculture..... 1,600.00	Private secretary to the Assistant Secretary of Agriculture..... 1,600.00
Stenographer and executive clerk to the Secretary of Agriculture..... 2,000.00	Stenographer and executive clerk to the Secretary of Agriculture..... 2,000.00	Stenographer and executive clerk to the Secretary of Agriculture..... 2,000.00
Stenographer to the Assistant Secretary of Agriculture..... 1,400.00	Stenographer to the Assistant Secretary of Agriculture..... 1,400.00	Stenographer to the Assistant Secretary of Agriculture..... 1,400.00
1 inspector..... 2,000.00	1 inspector..... 2,000.00	1 inspector..... 2,000.00
1 clerk, class three..... 1,600.00	1 clerk, class three..... 1,600.00	1 clerk, class three..... 1,600.00
2 clerks or messengers, at \$840..... 1,680.00	2 clerks or messengers, at \$840..... 1,680.00	2 clerks or messengers, at \$840..... 1,680.00
1 assistant messenger..... 720.00	1 assistant messenger..... 720.00	1 assistant messenger..... 720.00
33,000.00	33,500.00	37,580.00
Office of the Solicitor:	Office of the Solicitor:	Office of the Solicitor:
1 Solicitor..... 3,500.00	1 Solicitor..... 4,000.00	1 Solicitor..... 4,000.00
2 clerks, class four..... 3,600.00	2 clerks, class four..... 3,600.00	3 clerks, class four..... 5,400.00
2 clerks, class three..... 3,200.00	3 clerks, class three..... 4,800.00	3 clerks, class three..... 4,800.00
1 clerk, class two..... 1,400.00	2 clerks, class two..... 2,800.00	3 clerks, class two..... 4,200.00
1 clerk, class one..... 1,200.00	2 clerks, class one..... 2,400.00	2 clerks, class one..... 2,400.00
1 assistant messenger..... 600.00	1 assistant messenger..... 600.00	1 assistant messenger..... 600.00
13,500.00	18,200.00	21,400.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of the Secretary—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Office of the Secretary, 1908, \$119,200—Continued.</i>	<i>Salaries, Office of the Secretary, 1909, \$132,900—Continued.</i>	<i>Salaries, Office of the Secretary, 1910, \$162,300—Continued.</i>
The above force performed the following duties—Con.	The above force is performing the following duties—Cont'd.	The above force will perform the following duties—Cont'd.
Appointment Division:	Appointment Division:	Appointment Division:
1 Appointment Clerk..... \$2,000.00	1 Appointment Clerk..... \$2,000.00	1 Appointment Clerk..... \$2,000.00
1 clerk, class four..... 1,800.00	1 clerk, class four..... 1,800.00	2 clerks, class four..... 3,600.00
1 clerk, class three..... 1,600.00	1 clerk, class three..... 1,600.00	1 clerk, class three..... 1,600.00
2 clerks, class one..... 2,400.00	1 clerk, class two..... 1,400.00	2 clerks, class two..... 2,800.00
1 clerk..... 1,000.00	2 clerks, class one..... 2,400.00	2 clerks, class one..... 2,400.00
2 clerks, at \$900..... 1,800.00	2 clerks, at \$1,000..... 2,000.00	2 clerks, at \$1,000..... 2,000.00
1 clerk..... 840.00	2 clerks, at \$900..... 1,800.00	3 clerks, at \$900..... 2,700.00
1 messenger..... 720.00	1 clerk..... 840.00	1 clerk..... 840.00
1 assistant messenger..... 720.00	1 messenger..... 720.00	1 messenger..... 720.00
1 assistant messenger..... 450.00	1 assistant messenger..... 720.00	1 assistant messenger..... 720.00
	1 assistant messenger..... 450.00	1 assistant messenger..... 450.00
	15,760.00	19,860.00
Supply Division:	Supply Division:	Supply Division:
1 Chief of Supply Division..... 2,000.00	1 Chief of Supply Division..... 2,000.00	1 Chief of Supply Division..... 2,000.00
1 clerk, class two..... 1,400.00	1 clerk, class two..... 1,400.00	1 clerk, class two..... 1,400.00
1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00
1 clerk or messenger..... 840.00	1 clerk..... 1,000.00	1 clerk..... 1,000.00
1 clerk or laborer..... 720.00	1 clerk or messenger..... 840.00	1 clerk..... 840.00
1 assistant messenger or laborer..... 600.00	1 clerk or laborer..... 720.00	1 clerk or messenger..... 840.00
1 laborer..... 600.00	1 laborer..... 600.00	1 clerk or laborer..... 720.00
	7,760.00	8,600.00
File room:	File room:	File room:
1 clerk, class two..... 1,400.00	1 clerk, class two..... 1,400.00	1 clerk, class two..... 1,400.00
1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00	2 clerks, class one..... 2,400.00
1 clerk..... 1,000.00	2 clerks, at \$1,000..... 2,000.00	4 clerks, at \$1,000..... 4,000.00
1 clerk or messenger..... 840.00	1 clerk..... 900.00	2 clerks, at \$900..... 1,800.00
1 clerk or laborer..... 720.00	1 clerk or messenger..... 840.00	1 clerk or messenger..... 840.00
1 assistant messenger..... 600.00	1 clerk or laborer..... 720.00	1 clerk or laborer..... 720.00
	1 assistant messenger..... 600.00	1 assistant messenger..... 600.00
	7,660.00	11,760.00
Telegraph and telephone section:	Telegraph and telephone section:	Telegraph and telephone section:
1 telegraph and telephone operator..... 1,400.00	1 telegraph and telephone operator..... 1,400.00	1 telegraph and telephone operator..... 1,400.00
1 telegraph and telephone operator..... 1,200.00	1 telegraph and telephone operator..... 1,200.00	1 clerk..... 840.00
1 clerk or laborer..... 720.00	1 clerk or laborer..... 720.00	1 clerk or laborer..... 720.00
1 assistant messenger..... 720.00	1 assistant messenger..... 720.00	1 assistant messenger..... 720.00
	4,040.00	3,680.00
Engineers, watchmen, messengers, laborers, charwomen, etc.:	Engineers, watchmen, messengers, laborers, charwomen, etc.:	Engineers, watchmen, messengers, laborers, charwomen, etc.:
1 chief engineer..... 1,600.00	1 chief engineer..... 1,600.00	1 chief engineer, who shall be captain of the watch..... 1,600.00
3 assistant firemen, at \$720..... 2,160.00	1 assistant engineer..... 1,400.00	1 assistant engineer..... 1,400.00
1 fireman, who shall be a steam fitter..... 900.00	2 assistant engineers, at \$1,000..... 2,000.00	2 assistant engineers, at \$1,000..... 2,000.00
1 assistant fireman..... 600.00	4 firemen, at \$720..... 2,880.00	4 firemen, at \$720..... 2,880.00
1 electrician..... 1,000.00	4 elevator conductors, at \$720..... 2,880.00	4 elevator conductors, at \$720..... 2,880.00
1 lieutenant of watch..... 1,000.00	1 electrician..... 1,000.00	1 electrician..... 1,000.00
15 watchmen, at \$720..... 10,800.00	1 lieutenant of watch..... 1,000.00	1 lieutenant of watch..... 1,000.00
1 skilled laborer..... 840.00	15 watchmen, at \$720..... 10,800.00	27 watchmen, at \$720..... 19,440.00
3 skilled laborers, at \$600..... 1,800.00	1 mechanic..... 1,100.00	1 mechanic..... 1,100.00
1 skilled laborer..... 450.00	1 skilled laborer..... 840.00	1 skilled laborer..... 840.00
11 laborers, at \$450..... 5,250.00	3 skilled laborers, at \$600..... 1,800.00	3 skilled laborers, at \$600..... 1,800.00
1 charwoman..... 540.00	1 skilled laborer..... 450.00	1 skilled laborer..... 450.00
5 charwomen, at \$240..... 1,200.00	11 laborers, at \$450..... 5,250.00	4 laborers, at \$600..... 2,400.00
	1 charwoman..... 540.00	11 laborers, at \$450..... 5,250.00
	5 charwomen, at \$240..... 1,200.00	1 charwoman..... 540.00
	34,800.00	45,840.00
Post-office:	Post-office:	Post-office:
1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00
1 clerk..... 1,000.00	1 clerk..... 1,100.00	1 clerk..... 1,000.00
1 clerk or laborer..... 720.00	1 clerk or laborer..... 720.00	1 clerk or laborer..... 720.00
1 skilled laborer..... 660.00	1 skilled laborer..... 660.00	1 skilled laborer..... 660.00
	3,580.00	3,580.00
Rubber stamp section:	Rubber stamp section:	Rubber stamp section:
1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00
1 mechanic..... 1,100.00	1 mechanic..... 1,100.00	2 mechanics, at \$1,200..... 2,400.00
2 skilled laborers, at \$720..... 1,440.00	2 skilled laborers, at \$720..... 1,440.00	1 mechanic..... 1,100.00
	3,740.00	2 skilled laborers, at \$720..... 1,440.00
		6,140.00
Carpenter shop:	Carpenter shop:	Carpenter shop:
1 carpenter..... 1,000.00	1 cabinetmaker..... 1,100.00	1 cabinetmaker..... 1,100.00
	1 carpenter..... 1,000.00	1 carpenter..... 1,000.00
	2,100.00	2,100.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of the Secretary—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Office of the Secretary, 1908, \$119,200—Continued.</i>	<i>Salaries, Office of the Secretary, 1909, \$132,900—Continued.</i>	<i>Salaries, Office of the Secretary, 1910, \$162,300—Continued.</i>
The above force performed the following duties—Con.	The above force is performing the following duties—Cont'd.	The above force will perform the following duties—Cont'd.
Plumbing shop: 1 plumber..... \$900.00 1 skilled laborer..... 720.00 1,620.00	Plumbing shop: 1 plumber..... \$900.00 1 skilled laborer..... 720.00 1,620.00	Plumbing shop: 1 plumber..... \$900.00 1 skilled laborer..... 720.00 1,620.00
Paint shop: 1 painter..... 900.00 1 painter..... 720.00 1,620.00	Paint shop: 1 painter..... 900.00 1 painter..... 720.00 1,620.00	Paint shop: 1 painter..... 900.00 1 painter..... 720.00 1,620.00
Blacksmith shop: 1 blacksmith..... 840.00	Blacksmith shop: 1 blacksmith..... 840.00	Blacksmith shop: 1 blacksmith..... 840.00
Stable: 2 clerks or messengers, at \$840..... 1,680.00 1 assistant messenger..... 720.00 1 laborer..... 720.00 3,120.00	Stable: 2 clerks or messengers, at \$840.. 1,680.00 1 laborer..... 720.00 1 assistant messenger..... 720.00 3,120.00	Stable: 2 clerks or messengers, at \$840.. 1,680.00 1 assistant messenger..... 720.00 1 laborer..... 720.00 3,120.00
Details from Secretary's office to various bureaus: 1 clerk, class two..... 1,400.00 1 clerk..... 1,000.00 1 clerk..... 900.00 2 clerks or messengers, at \$840..... 1,680.00 4,980.00	Details from Secretary's office to various bureaus: 1 clerk, class two..... 1,400.00 1 clerk..... 1,000.00 1 clerk..... 900.00 2 clerks or messengers, at \$840.. 1,680.00 4,980.00	Details from Secretary's office to various bureaus: 1 clerk, class two..... 1,400.00 1 clerk..... 1,000.00 1 clerk..... 900.00 2 clerks or messengers, at \$840.. 1,680.00 4,980.00
Extra laborers, emergency employment, and pay of rents.. 7,600.00	Extra laborers, emergency employment, and pay of rents..... 7,600.00	Extra laborers, emergency employment, and pay of rents..... 7,600.00
Total..... 133,320.00	Total..... 150,920.00	Total..... 180,320.00
NOTE.—Of the above the following were detailed to the office of the Secretary by the various bureaus:	NOTE.—Of the above the following are detailed to the office of the Secretary by the various bureaus:	NOTE.—Of the above the following will be detailed to the office of the Secretary by the various bureaus:
2 clerks, class four..... \$3,600.00 1 clerk, class three..... 3,200.00 1 clerk, class two..... 1,400.00 2 clerks, at \$1,000..... 2,000.00 2 clerks, at \$900..... 1,800.00 1 clerk or messenger..... 840.00 1 messenger..... 720.00 2 skilled laborers, at \$720..... 1,440.00 1 laborer..... 720.00 14,120.00 119,200.00	2 clerks, class four..... \$3,600.00 2 clerks, class three..... 3,200.00 1 clerk, class two..... 1,400.00 1 clerk, class one..... 1,200.00 2 clerks, at \$1,000..... 2,000.00 2 clerks, at \$900..... 1,800.00 1 clerk or messenger..... 840.00 1 messenger..... 720.00 1 mechanic..... 1,100.00 2 skilled laborers, at \$720.. 1,440.00 1 laborer..... 720.00 18,020.00 132,900.00	2 clerks, class four..... \$3,600.00 2 clerks, class three..... 3,200.00 1 clerk, class two..... 1,400.00 1 clerk, class one..... 1,200.00 2 clerks, at \$1,000..... 2,000.00 2 clerks, at \$900..... 1,800.00 1 clerk or messenger..... 840.00 1 messenger..... 720.00 1 mechanic..... 1,100.00 2 skilled laborers, at \$720.. 1,440.00 1 laborer..... 720.00 18,020.00 162,300.00

WEATHER BUREAU.

<i>Salaries, Office of Chief of Weather Bureau, \$196,990.</i>	<i>Salaries, Office of Chief of Weather Bureau, \$202,510.</i>	<i>Salaries, Office of Chief of Weather Bureau, \$204,310.</i>
Moore, Willis L..... Chief of Bureau, at \$5,000..... \$5,000.00	1 Chief of Bureau..... \$5,000.00	1 Chief of Bureau..... \$5,000.00
Williams, H. E..... Assistant Chief of Bureau, at \$3,000..... 3,000.00	1 Assistant Chief of Bureau..... 3,000.00	1 Assistant Chief of Bureau..... 3,000.00
Carroll, D. J..... Chief clerk, at \$2,250..... 2,250.00	1 chief clerk..... 2,250.00	1 chief clerk..... 2,250.00
Cleaver, F. M..... Chief of division, at \$2,000..... 2,000.00	4 chiefs of division, at \$2,000 each..... 8,000.00	4 chiefs of division, at \$2,000 each..... 8,000.00
Church, John P..... Chief of division, at \$2,000..... 2,000.00	1 librarian..... 2,000.00	1 librarian..... 2,000.00
Heiskell, Henry L..... Chiefs of division, at \$2,000..... 450.00	6 clerks, class four..... 10,800.00	7 clerks, class four..... 12,600.00
Page, James..... 1,550.00	7 clerks, class three..... 11,200.00	7 clerks, class three..... 11,200.00
Robinson, J. H..... Chief of division, at \$2,000..... 2,000.00	18 clerks, class two..... 25,200.00	18 clerks, class two..... 25,200.00
Kimball, H. H..... Librarian and climatologist..... 2,000.00	27 clerks, class one..... 32,400.00	27 clerks, class one..... 32,400.00
Day, Preston C..... Clerks, class four..... 1,395.00	18 clerks, at \$1,000 each..... 18,000.00	18 clerks, at \$1,000 each..... 18,000.00
Heiskell, Henry L..... 405.00	9 clerks, at \$900 each..... 8,100.00	9 clerks, at \$900 each..... 8,100.00
Gillam, Frank..... Clerk, class four..... 1,800.00	4 copyists or typewriters, at \$840 each..... 3,360.00	4 copyists or typewriters, at \$840 each..... 3,360.00
Hunt, George E..... Clerk, class four..... 1,800.00	1 copyist or typewriter..... 720.00	1 copyist or typewriter..... 720.00
Jones, J. H..... Clerk, class four..... 1,800.00	2 assistant foremen of division, at \$1,600 each..... 3,200.00	2 assistant foremen of division, at \$1,600 each..... 3,200.00
Maring, D. T..... Clerk, class four..... 1,800.00	1 proof reader..... 1,400.00	1 proof reader..... 1,400.00
Seyboth, Robert..... Clerk, class four..... 1,800.00	1 chief mechanic..... 1,400.00	1 chief mechanic..... 1,400.00
Ashton, John C..... Clerks, class three..... 266.67	1 lithographer..... 1,300.00	1 lithographer..... 1,300.00
Kinnear, A. H..... 1,240.00	3 lithographers, at \$1,200 each..... 3,600.00	3 lithographers, at \$1,200 each..... 3,600.00
Bennett, M. C..... Clerks, class three..... 359.99	2 pressmen, at \$1,250 each..... 2,500.00	2 pressmen, at \$1,250 each..... 2,500.00
Day, Preston C..... 1,240.00	10 compositors, at \$1,250 each..... 12,500.00	10 compositors, at \$1,250 each..... 12,500.00
Moore, Theodore T..... Clerks, class three..... 1,600.00	1 skilled mechanic..... 1,200.00	1 skilled mechanic..... 1,200.00
Pugh, T. O..... Clerk, class three..... 1,600.00	6 skilled mechanics, at \$1,000 each..... 6,000.00	6 skilled mechanics, at \$1,000 each..... 6,000.00
Smith, G. W..... Clerk, class two..... 1,600.00	1 engineer..... 1,200.00	1 engineer..... 1,200.00
Stewart, John C..... Clerk, class two..... 1,400.00	1 captain of the watch..... 1,000.00	1 captain of the watch..... 1,000.00
Beall, S. W..... Clerk, class two..... 1,400.00	1 electrician..... 1,000.00	1 electrician..... 1,000.00
Berry, William..... Clerk, class two..... 1,400.00	6 skilled artisans, at \$840 each..... 5,040.00	6 skilled artisans, at \$840 each..... 5,040.00
Beuter, Sophia A..... Clerk, class two..... 1,400.00	5 messengers or laborers, at \$720 each..... 3,600.00	5 messengers or laborers, at \$720 each..... 3,600.00
Blundon, Benjamin A..... Clerk, class two..... 1,400.00	3 firemen, at \$720 each..... 2,160.00	3 firemen, at \$720 each..... 2,160.00
Donaldson, William F..... Clerks, class two..... 1,396.11	4 watchmen, at \$720 each..... 2,880.00	4 watchmen, at \$720 each..... 2,880.00
Dunstan, Edwin W..... 70.00	5 folders and feeders, at \$720 each..... 3,600.00	5 folders and feeders, at \$720 each..... 3,600.00
Husson, William M..... Clerks, class two..... 1,197.77	3 folders and feeders, at \$630 each..... 1,890.00	3 folders and feeders, at \$630 each..... 1,890.00
Tingley, Franklin G..... 116.67		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.		Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Office of Chief of Weather Bureau, \$196,990—Continued.</i>		<i>Salaries, Office of Chief of Weather Bureau, \$202,510—Continued.</i>	<i>Salaries, Office of Chief of Weather Bureau, \$204,310—Continued.</i>
Easton, Edward C.....	Clerk, class two.....	\$1,400.00	6 messengers or laborers, at \$660 each \$3,960.00
Foy, J. T.....	Clerk, class two.....	1,400.00	13 messengers, messenger boys, or laborers, at \$600 each..... 7,800.00
Goucher, Henry.....	Clerk, class two.....	1,400.00	4 messengers, messenger boys, or laborers, at \$480 each..... 1,920.00
Holmes, Charles.....	Clerk, class two.....	1,400.00	5 messengers, messenger boys, or laborers, at \$450 each..... 2,250.00
Johnson, Enoch G.....	Clerk, class two.....	1,400.00	1 charwoman..... 360.00
Kinnear, Aaron H.....	Clerks, class two.....	1,166.66	3 charwomen, at \$240 each..... 720.00
Marean, Delzene.....		233.34	
Monroe, Joseph U.....	Clerk, class two.....	1,085.00	
Moore, Theodore T.....		315.00	
Porter, W. D.....	Clerk, class two.....	1,400.00	
Potter, S. A.....	Clerk, class two.....	1,400.00	
Smith, H. W.....	Clerk, class two.....	1,400.00	
Talman, Charles F.....	Clerk, class two.....	1,400.00	
Volker, Hermann.....	Clerk, class two.....	1,400.00	
Ashton, Clinton J.....	Clerk, class one.....	1,200.00	
Bigham, C. Grant.....	Clerk, class one.....	1,200.00	
Chapman, Mattie H.....	Clerk, class one.....	1,200.00	
Cleveland, Luman M.....	Clerk, class one.....	1,200.00	
Clough, Homer W.....	Clerk, class one.....	1,200.00	
Cook, James R.....	Clerk, class one.....	1,200.00	
Cooke, Henry C.....	Clerk, class one.....	46.67	
Hunter, Herbert C.....		1,150.00	
Cooper, Claude C.....	Clerk, class one.....	1,200.00	
Crawford, Thomas.....	Clerk, class one.....	1,190.00	
Dunstan, Edwin V.....	Clerk, class one.....	100.00	
Tingley, Franklin G.....		1,100.00	
Edwards, Rowena A.....	Clerk, class one.....	876.67	
Monroe, Joseph U.....		270.00	
Fry, John C.....	Clerk, class one.....	1,200.00	
Gardiner, I. Gwynn.....	Clerk, class one.....	1,200.00	
Hercus, Alice T.....	Clerk, class one.....	1,200.00	
Hesse, Conrad E.....	Clerk, class one.....	1,200.00	
Hobbs, Hermann E.....	Clerk, class one.....	1,200.00	
Marean, Delzene.....	Clerk, class one.....	1,000.00	
Merrill, Herbert C.....		200.00	
Mattison, E. M.....	Clerk, class one.....	1,200.00	
Melton, J. H.....	Clerk, class one.....	1,200.00	
Meston, R. D.....	Clerk, class one.....	1,200.00	
Minnick, S. Percy.....	Clerk, class one.....	1,200.00	
Parker, William N.....	Clerk, class one.....	1,200.00	
Taylor, Charles W.....	Clerk, class one.....	433.33	
Young, Frederic A.....		766.67	
Thompson, Arthur.....	Clerk, class one.....	1,200.00	
Whiteside, J. L.....	Clerk, class one.....	1,200.00	
Wilson, Joseph B.....	Clerk, class one.....	1,200.00	
Amer, Harry L.....	Clerk at \$1,000.....	1,000.00	
Calvert, Samuel C.....		166.67	
Merrill, Herbert C.....	Clerk at \$1,000.....	833.33	
Diehl, Genevra B.....	Clerk at \$1,000.....	1,000.00	
Dome, Charles E.....		819.44	
Hunter, Herbert C.....	Clerk at \$1,000.....	41.67	
Stone, Jesse R.....		136.12	
Dugan, Henry P.....	Clerk at \$1,000.....	1,000.00	
Edwards, Rowena A.....		224.99	
Mills, Chester L.....	Clerk at \$1,000.....	316.67	
Pollock, Rosswitte E.....		453.33	
Emery, Frank D.....	Clerk at \$1,000.....	966.67	
Graf, Fred M.....	Clerk at \$1,000.....	1,000.00	
Hawkins, Laura F.....	Clerk at \$1,000.....	1,000.00	
Hotze, Ruby S.....	Clerk at \$1,000.....	1,000.00	
Kadel, Benjamin C.....	Clerk at \$1,000.....	1,000.00	
Lazenby, Richard O.....	Clerk at \$1,000.....	1,000.00	
Magrum, Albert F.....	Clerk at \$1,000.....	1,000.00	
Miller, Robert L.....	Clerk at \$1,000.....	1,000.00	
Rausch, Gustav E.....	Clerk at \$1,000.....	1,000.00	
Rohrer, Charles W.....	Clerk at \$1,000.....	1,000.00	
Weightman, R. Hanson.....	Clerk at \$1,000.....	1,000.00	
Barger, Jervase J. P.....	Clerk at \$900.....	900.00	
Cade, William R.....	Clerk at \$900.....	150.00	
Calvert, Samuel C.....		750.00	
Cade, William R.....	Clerk at \$900.....	122.50	
Stone, Jesse R.....		777.50	
Dome, Charles E.....	Clerk at \$900.....	37.50	
Wiest, Edward S.....		862.50	
Johnson, Edward H.....	Clerk at \$900.....	900.00	
Long, Mary.....	Clerk at \$900.....	900.00	
Mills, Chester L.....	Clerk at \$900.....	202.50	
Weber, William.....		697.50	
Tracy, Anson R.....	Clerk at \$900.....	900.00	
Williamson, Robert M.....	Clerk at \$900.....	900.00	
Buchanan, Elmer R.....	Copyist at \$840.....	651.00	
Weber, William.....		189.09	
Cade, William R.....		550.67	
Le Duc, Louis B.....		114.33	
MacCallen, Lucile F.....	Copyist at \$840.....	65.33	
Warren, Marie J.....		28.00	
Wiest, Edward S.....		35.00	
Yates, Nellie.....		18.67	
Cogswell, Daniel B.....	Copyist at \$840.....	840.00	
Hamrick, Andy M.....	Copyist at \$840.....	840.00	
Peticolas, Virginia M.....	Copyist at \$720.....	720.00	
King, Thomas H.....	Assistant foreman of division, at \$1,600.....	1,600.00	
Larcombe, B. F.....	Assistant foreman of division, at \$1,600.....	1,600.00	
Winters, L.....	Proof reader, at \$1,400.....	1,400.00	
		Total amount of above appropriation (an increase over 1908 of \$5,520).....	Total amount estimated (an increase over 1909 of \$1,800).....
		202,510.00	204,310.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (54 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Office of Chief of Weather Bureau, \$196,990—Continued.</i>	<i>Salaries, Office of Chief of Weather Bureau, \$202,510—Continued.</i>	<i>Salaries, Office of Chief of Weather Bureau, \$204,510—Continued.</i>
Tuch, C. B..... Chief mechanic, at \$1,400.....	\$1,400.00	
Long, Samuel C..... Lithographer, at \$1,300.....	1,300.00	
Allen, George..... Lithographer, at \$1,200.....	1,200.00	
Fraber, J. W..... Lithographer, at \$1,200.....	1,200.00	
Keough, W..... Lithographer, at \$1,200.....	1,200.00	
Ackerman, Abram A..... Pressman, at \$1,250.....	1,250.00	
Whitman, Edgar C..... Pressman, at \$1,250.....	1,250.00	
Buhrman, Oscar H..... Compositor, at \$1,250.....	1,250.00	
Burns, Charles T..... Compositor, at \$1,250.....	1,250.00	
Cooper, Robert S..... Compositor, at \$1,250.....	1,250.00	
Emmons, Lucius H..... Compositor, at \$1,250.....	1,250.00	
Estes, Samuel B..... Compositor, at \$1,250.....	1,250.00	
Farrington, W. H..... Compositor, at \$1,250.....	1,250.00	
Green, William B..... Compositor, at \$1,250.....	1,250.00	
Hutchinson, James E..... Compositors, at \$1,250.....	1,121.53	
Stewart, William A..... Compositors, at \$1,250.....	128.47	
McCallum, Daniel..... Compositor, at \$1,250.....	1,234.37	
von Osterman, George F..... Compositor, at \$1,250.....	1,250.00	
Claveloux, F. A..... Skilled mechanic, at \$1,200.....	1,200.00	
Balster, John A..... Skilled mechanic, at \$1,000.....	861.12	
Dillon, Edward..... Skilled mechanic, at \$1,000.....	136.10	
Collins, James F..... Skilled mechanic, at \$1,000.....	1,000.00	
Martin, Julius J..... Skilled mechanic, at \$1,000.....	1,000.00	
Newham, Richard S..... Skilled mechanic, at \$1,000.....	1,000.00	
Sharp, Stewart S..... Skilled mechanic, at \$1,000.....	1,000.00	
Plecher, C. H..... Engineer, at \$1,200.....	1,200.00	
Johnson, Hiram..... Captain of watch, at \$1,000.....	1,000.00	
O'Neil, Daniel F..... Electrician, at \$1,000.....	1,000.00	
Balster, John A..... Skilled artisan, at \$840.....	116.67	
Harvey, William O..... Skilled artisan, at \$840.....	58.33	
Hughes, Everett H..... Skilled artisan, at \$840.....	665.00	
Chambers, Charles W..... Skilled artisan, at \$840.....	840.00	
Francis, Fred. L..... Skilled artisan, at \$840.....	840.00	
Haynes, John M..... Skilled artisan, at \$840.....	840.00	
Patrick, William..... Skilled artisan, at \$840.....	840.00	
Thornton, Walter S..... Skilled artisan, at \$840.....	840.00	
Brown, Joseph..... Messenger or laborer, at \$720.....	720.00	
Driscoll, Michael J..... Messenger or laborer, at \$720.....	620.00	
Harvey, William O..... Messenger or laborer, at \$720.....	100.00	
Eichelberger, Thomas H..... Messenger or laborer, at \$720.....	719.00	
Hayes, Michael..... Messenger or laborer, at \$720.....	720.00	
McLane, William, jr..... Messenger or laborer, at \$720.....	720.00	
Barrett, William J..... Fireman, at \$720.....	720.00	
Hudson, James M..... Fireman, at \$720.....	720.00	
Morton, R. H..... Fireman, at \$720.....	720.00	
Bacon, Samuel, jr..... Watchman, at \$720.....	720.00	
Harvey, William O..... Watchman, at \$720.....	390.00	
Hughes, Everett H..... Watchman, at \$720.....	150.00	
Wagner, George..... Watchman, at \$720.....	52.00	
Sullivan, John..... Watchman, at \$720.....	720.00	
Burns, John T. S..... Folder and feeder, at \$720.....	420.00	
Prueser, Herman C..... Folder and feeder, at \$720.....	220.00	
Ford, Charles B..... Folder and feeder, at \$720.....	718.00	
Fowler, Archibald W..... Folder and feeder, at \$720.....	402.00	
Fox, Harry A..... Folder and feeder, at \$720.....	316.00	
Jefferson, Wesley W..... Folder and feeder, at \$720.....	629.00	
Smith, Thomas G..... Folder and feeder, at \$720.....	90.00	
Stone, Thad..... Folder and feeder, at \$720.....	720.00	
Carter, Wade H..... Folder and feeder, at \$630.....	194.25	
Grosvenor, Clara E..... Folder and feeder, at \$630.....	242.37	
Grosvenor, Frederic L..... Folder and feeder, at \$630.....	67.38	
Strecker, Helen..... Folder and feeder, at \$630.....	88.37	
Fowler, Archibald W..... Folder and feeder, at \$630.....	194.25	
Hanke, Clara D..... Folder and feeder, at \$630.....	183.75	
Jefferson, Wesley W..... Folder and feeder, at \$630.....	78.75	
Keithley, John A..... Folder and feeder, at \$630.....	126.87	
Hoagland, Annie E..... Folder and feeder, at \$630.....	630.00	
Driscoll, Michael J..... Messenger or laborer, at \$660.....	91.67	
Plummer, William, jr..... Messenger or laborer, at \$660.....	568.33	
Dunmore, John A..... Messenger or laborer, at \$660.....	537.17	
Holderith, Alois..... Messenger or laborer, at \$660.....	55.00	
Torbert, Frank P..... Messenger or laborer, at \$660.....	67.83	
Jones, William..... Messenger or laborer, at \$660.....	141.17	
Scott, Isaac N..... Messenger or laborer, at \$660.....	130.17	
Smith, Walter..... Messenger or laborer, at \$660.....	267.66	
Tracy, Frank T..... Messenger or laborer, at \$660.....	110.00	
Plummer, W..... Messenger or laborer, at \$660.....	660.00	
Talt, Lemuel E..... Messenger or laborer, at \$660.....	660.00	
Wolcott, John W..... Messenger or laborer, at \$660.....	660.00	
Branham, E. A..... Messenger, messenger boy, or laborer, at \$600.....	600.00	
Brown, Moses H..... Messenger, messenger boy, or laborer, at \$600.....	586.67	
Dalton, Samuel S..... Messenger, messenger boy, or laborer, at \$600.....	13.33	
Butler, Benjamin F..... Messenger, messenger boy, or laborer, at \$600.....	36.67	
Lowe, J. Hervey..... Messenger, messenger boy, or laborer, at \$600.....	131.67	
McNaught, Archibald..... Messenger, messenger boy, or laborer, at \$600.....	418.33	
Dalton, Samuel S..... Messenger, messenger boy, or laborer, at \$600.....	13.33	
Holderith, Alois..... Messenger, messenger boy, or laborer, at \$600.....	475.00	
Laskowski, Bernard R..... Messenger, messenger boy, or laborer, at \$600.....	50.00	
Parker, Walter..... Messenger, messenger boy, or laborer, at \$600.....	50.83	
Dunmore, John A..... Messenger, messenger boy, or laborer, at \$600.....	61.67	
McCreight, John H..... Messenger, messenger boy, or laborer, at \$600.....	538.33	
Feigley, Joseph M..... Messenger, messenger boy, or laborer, at \$600.....	600.00	
Glover, George J..... Messenger, messenger boy, or laborer, at \$600.....	600.00	
Keller, David..... Messenger, messenger boy, or laborer, at \$600.....	137.49	
Williams, Max..... Messenger, messenger boy, or laborer, at \$600.....	450.00	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Office of Chief of Weather Bureau, \$196,990—Continued.</i>		
Lee, Jesse B.....	Messenger, messenger boy, or { \$350.00	
Plummer, William, Jr.....	laborer, at \$600. { 83.33	
Thomas, George W.....	66.67	
McDermott, Edward.....	Messenger, messenger boy, or { 600.00	
	laborer, at \$600. {	
Patrick, Thomas.....	Messenger, messenger boy, or { 600.00	
	laborer, at \$600. {	
Stepp, John W.....	Messenger, messenger boy, or { 100.00	
Tracy, Frank T.....	laborer, at \$600. { 500.00	
Washington, Rudolph.....	Messenger, messenger boy, or { 600.00	
	laborer, at \$600. {	
Coe, Edmund G.....	Messenger, messenger boy, or { 30.67	
Priest, John G.....	laborer, at \$480. { 329.33	
Williams, Max.....	120.00	
Gardiner, F. Gwynn.....	80.00	
McCreight, John H.....	Messenger, messenger boy, or { 49.33	
Stepp, John W.....	laborer, at \$480. { 333.33	
Thomas, George W.....	17.33	
Lee, Jesse B.....	Messenger, messenger boy, or { 200.00	
Mankin, Le Roy T.....	laborer, at \$480. { 280.00	
Lee, Plato T.....	Messenger, messenger boy, or { 477.33	
	laborer, at \$480. {	
Coe, Edmund G.....	Messenger, messenger boy, or { 351.25	
Primm, Paul H.....	laborer, at \$450. { 28.75	
Stepp, John W.....	62.50	
Gardiner, F. Gwynn.....	Messenger, messenger boy, or { 375.00	
Harris, Robert.....	laborer, at \$450. { 75.00	
Keller, David.....	217.50	
Mankin, Le Roy T.....	Messenger, messenger boy, or la- { 187.50	
Smith, Enos B.....	borer, at \$450. { 37.50	
Peirce, Kenneth R.....	403.75	
Thomas, George W.....	46.25	
Priest, John G.....	112.50	
Turner, Linwood.....	330.00	
Lomax, Amanda.....	Charwoman, at \$360. { 360.00	
Bruce, Fannie E.....	20.00	
Templeton, Clara A.....	Charwoman, at \$240. { 220.00	
Crabbe, Lydia M.....	240.00	
Payne, Lucy.....	240.00	
Expenditures up to September 30, 1908.....	196,222.16	
Outstanding liabilities on September 30, 1908.....	28.00	
Balance to be turned back in Treasury.....	739.84	
Total amount of above appropriation.....	196,990.00	
The above force performed the following duties:		
Accounts division (charge of the accounts of the Weather Bureau, including the leasing of offices and the construction and repair of buildings outside of Washington):		
*1 assistant chief, division of accounts.....	2,500.00	
2 clerks, at \$1,600 each.....	3,200.00	
2 clerks, at \$1,400 each.....	2,800.00	
*1 clerk.....	1,400.00	
4 clerks, at \$1,200 each.....	4,800.00	
1 clerk.....	1,000.00	
2 clerks, at \$900 each.....	1,800.00	
1 copyist.....	840.00	
1 messenger.....	660.00	
	19,000.00	
Administration:		
1 chief of bureau.....	5,000.00	
1 assistant chief of bureau.....	3,000.00	
1 chief clerk.....	2,250.00	
1 clerk.....	1,800.00	
2 clerks, at \$1,600 each.....	3,200.00	
1 clerk.....	1,400.00	
4 clerks, at \$1,200 each.....	4,800.00	
1 clerk.....	1,000.00	
1 copyist.....	840.00	
1 messenger.....	600.00	
1 messenger.....	450.00	
	24,340.00	
Climatological division (supervision of the observations taken by cooperative observers located in nearly every county in the United States, the printing of the climatic data that are collected, and the collection and distribution of special observations made in the cotton, corn, wheat, and fruit sections of the United States during the crop-growing season):		
*1 chief of division.....	2,750.00	
1 clerk.....	1,800.00	
1 clerk.....	1,600.00	
1 clerk.....	1,400.00	
2 clerks, at \$1,000 each.....	2,000.00	
1 clerk.....	900.00	
1 messenger.....	660.00	
	11,110.00	
<i>Salaries, Office of Chief of Weather Bureau, \$202,510—Continued.</i>		
The above force are performing the following duties:		
Accounts division:		
*1 assistant chief, division of accounts.....	\$2,500.00	
1 clerk.....	1,800.00	
1 clerk.....	1,600.00	
3 clerks, at \$1,400 each.....	4,200.00	
3 clerks, at \$1,200 each.....	3,600.00	
2 clerks, at \$1,000 each.....	2,000.00	
1 clerk.....	900.00	
1 copyist.....	840.00	
1 messenger.....	660.00	
	18,100.00	
Administration:		
1 chief of bureau.....	5,000.00	
1 assistant chief of bureau.....	3,000.00	
1 chief clerk.....	2,250.00	
2 clerks, at \$1,800 each.....	3,600.00	
3 clerks, at \$1,600 each.....	4,800.00	
3 clerks, at \$1,400 each.....	4,200.00	
6 clerks, at \$1,200 each.....	7,200.00	
2 clerks, at \$1,000 each.....	2,000.00	
1 clerk.....	900.00	
1 copyist.....	840.00	
1 messenger.....	660.00	
1 laborer.....	600.00	
1 messenger.....	600.00	
	35,710.00	
Climatological division:		
*1 professor of meteorology, in charge of division.....	3,000.00	
1 clerk.....	1,800.00	
1 clerk.....	1,600.00	
1 clerk.....	1,400.00	
3 clerks, at \$1,200 each.....	3,600.00	
1 clerk.....	1,000.00	
1 clerk.....	900.00	
1 copyist.....	840.00	
1 copyist.....	720.00	
1 messenger.....	660.00	
1 messenger boy.....	450.00	
	15,970.00	
<i>Salaries, Office of Chief of Weather Bureau, \$204,310—Continued.</i>		
The above force will perform the following duties:		
Accounts division:		
*1 assistant chief, division of accounts.....	\$2,500.00	
1 clerk.....	1,800.00	
1 clerk.....	1,600.00	
3 clerks, at \$1,400 each.....	4,200.00	
3 clerks, at \$1,200 each.....	3,600.00	
2 clerks, at \$1,000 each.....	2,000.00	
1 clerk.....	900.00	
1 copyist.....	840.00	
1 messenger.....	660.00	
	18,100.00	
Administration:		
1 chief of bureau.....	5,000.00	
1 assistant chief of bureau.....	3,000.00	
1 chief clerk.....	2,250.00	
3 clerks, at \$1,800 each.....	5,400.00	
3 clerks, at \$1,600 each.....	4,800.00	
3 clerks, at \$1,400 each.....	4,200.00	
6 clerks, at \$1,200 each.....	7,200.00	
2 clerks, at \$1,000 each.....	2,000.00	
1 clerk.....	900.00	
1 copyist.....	840.00	
1 messenger.....	660.00	
1 laborer.....	600.00	
1 messenger.....	600.00	
	37,510.00	
Climatological division:		
*1 professor of meteorology, in charge of division.....	3,000.00	
1 clerk.....	1,800.00	
1 clerk.....	1,600.00	
1 clerk.....	1,400.00	
3 clerks, at \$1,200 each.....	3,600.00	
1 clerk.....	1,000.00	
1 clerk.....	900.00	
1 copyist.....	840.00	
1 copyist.....	720.00	
1 messenger.....	660.00	
1 messenger boy.....	450.00	
	15,970.00	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Office of Chief of Weather Bureau, \$196,990—Continued.</i>	<i>Salaries, Office of Chief of Weather Bureau, \$202,510—Continued.</i>	<i>Salaries, Office of Chief of Weather Bureau, \$204,310—Continued.</i>
The above force performed the following duties—Con.	The above force are performing the following duties—Cont'd.	The above force will perform the following duties—Cont'd.
Editorial work (the preparation of the Monthly Weather Review, which contains the weather records for the United States for the month for which it is issued, and special contributions pertaining to meteorological subjects):	Editorial work:	Editorial work:
*1 professor of meteorology..... \$3,000.00	*1 professor of meteorology..... \$3,000.00	*1 professor of meteorology..... \$3,000.00
1 clerk..... 1,200.00	1 clerk..... 1,400.00	1 clerk..... 1,400.00
4,200.00	4,400.00	4,400.00
Forecast division (supervision of the forecast and warning work of the entire bureau):	Forecast division:	Forecast division:
*1 professor of meteorology, in charge of division..... 3,000.00	*1 professor of meteorology, in charge of division..... 3,000.00	*1 professor of meteorology, in charge of division..... 3,000.00
*1 professor of meteorology, who is forecaster and in charge of river and flood work..... 3,000.00	*1 professor of meteorology, who is forecaster and in charge of river and flood work..... 3,000.00	*1 professor of meteorology, who is forecaster and in charge of river and flood work..... 3,000.00
*1 professor of meteorology, who is forecaster and compiler..... 3,000.00	2 clerks, at \$1,400 each..... 2,800.00	2 clerks, at \$1,400 each..... 2,800.00
2 clerks, at \$1,400 each..... 2,800.00	2 clerks, at \$1,200 each..... 2,400.00	2 clerks, at \$1,200 each..... 2,400.00
3 clerks, at \$1,200 each..... 3,600.00	3 clerks, at \$1,000 each..... 3,000.00	3 clerks, at \$1,000 each..... 3,000.00
3 clerks, at \$1,000 each..... 3,000.00	1 clerk..... 900.00	1 clerk..... 900.00
1 clerk..... 900.00	15,100.00	15,100.00
1 copyist..... 840.00		
20,140.00		
Instrument division (charge of the designing, manufacture, repair, selection, and issuing of instruments and apparatus used throughout the service):	Instrument division:	Instrument division:
*1 professor of meteorology, in charge of division..... 3,000.00	*1 professor of meteorology, in charge of division..... 3,000.00	*1 professor of meteorology, in charge of division..... 3,000.00
1 clerk..... 1,800.00	1 clerk..... 1,800.00	1 clerk..... 1,800.00
2 clerks, at \$1,400 each..... 2,800.00	2 clerks, at \$1,400 each..... 2,800.00	2 clerks, at \$1,400 each..... 2,800.00
1 chief mechanic..... 1,400.00	1 chief mechanic..... 1,400.00	1 chief mechanic..... 1,400.00
1 skilled mechanic..... 1,200.00	1 skilled mechanic..... 1,200.00	1 skilled mechanic..... 1,200.00
2 skilled mechanics, at \$1,000 each..... 2,000.00	2 skilled mechanics, at \$1,000 each..... 2,000.00	2 skilled mechanics, at \$1,000 each..... 2,000.00
1 messenger..... 720.00	2 messengers, at \$600 each..... 1,200.00	2 messengers, at \$600 each..... 1,200.00
1 messenger..... 600.00	13,400.00	13,400.00
13,520.00		
Library (contains over 30,000 volumes and pamphlets pertaining to meteorological subjects. The librarian is also a climatologist and the supervising examiner):	Library:	Library:
1 librarian and climatologist..... 2,000.00	1 librarian..... 2,000.00	1 librarian..... 2,000.00
1 clerk..... 1,400.00	1 clerk..... 1,200.00	1 clerk..... 1,200.00
1 clerk..... 1,200.00	1 clerk..... 1,000.00	1 clerk..... 1,000.00
1 messenger boy..... 480.00	1 messenger boy..... 600.00	1 messenger boy..... 600.00
5,080.00	4,800.00	4,800.00
Mechanical work (carpentry, electrical, and miscellaneous mechanical work required about the buildings and grounds):	Mechanical work:	Mechanical work:
2 skilled mechanics, at \$1,000 each..... 2,000.00	1 engineer..... 1,200.00	1 engineer..... 1,200.00
1 electrician..... 1,000.00	2 skilled mechanics, at \$1,000 each..... 2,000.00	2 skilled mechanics, at \$1,000 each..... 2,000.00
2 skilled artisans, at \$840 each..... 1,680.00	1 electrician..... 1,000.00	1 electrician..... 1,000.00
4,680.00	4 skilled artisans, at \$840 each..... 3,360.00	4 skilled artisans, at \$840 each..... 3,360.00
	3 firemen, at \$720 each..... 2,160.00	3 firemen, at \$720 each..... 2,160.00
	9,720.00	9,720.00
Captain of the watch and messenger and labor service:	Captain of the watch and messenger and labor service:	Captain of the watch and messenger and labor service:
1 clerk..... 1,000.00	1 clerk..... 1,000.00	1 clerk..... 1,000.00
1 captain of the watch..... 1,000.00	1 captain of the watch..... 1,000.00	1 captain of the watch..... 1,000.00
1 skilled artisan..... 840.00	1 skilled artisan..... 840.00	1 skilled artisan..... 840.00
3 watchmen, at \$720 each..... 2,160.00	1 messenger..... 720.00	1 messenger..... 720.00
2 laborers, at \$720 each..... 1,440.00	2 laborers, at \$720 each..... 1,440.00	2 laborers, at \$720 each..... 1,440.00
4 laborers, at \$600 each..... 2,400.00	4 watchmen, at \$720 each..... 2,880.00	4 watchmen, at \$720 each..... 2,880.00
2 messenger boys, at \$600 each..... 1,200.00	1 messenger boy..... 600.00	1 messenger boy..... 600.00
1 laborer..... 480.00	4 laborers, at \$600 each..... 2,400.00	4 laborers, at \$600 each..... 2,400.00
1 messenger..... 480.00	1 messenger boy..... 480.00	1 messenger boy..... 480.00
1 messenger boy..... 900.00	2 laborers, at \$480 each..... 960.00	2 laborers, at \$480 each..... 960.00
1 laborer..... 450.00	3 messenger boys, at \$450 each..... 1,350.00	3 messenger boys, at \$450 each..... 1,350.00
1 charwoman..... 360.00	1 charwoman..... 360.00	1 charwoman..... 360.00
3 charwomen, at \$240 each..... 720.00	3 charwomen, at \$240 each..... 720.00	3 charwomen, at \$240 each..... 720.00
13,910.00	14,750.00	14,750.00
Ocean meteorology (charge of the collection and issuing of marine meteorological data, the correction of barometers for vessel captains, and the preparation and distribution of marine information):	Marine division (name changed from ocean meteorology on July 1, 1908):	Marine division:
1 chief of division..... 2,000.00	1 chief of division..... 2,000.00	1 chief of division..... 2,000.00
2 clerks, at \$1,400 each..... 2,800.00	1 clerk..... 1,400.00	1 clerk..... 1,400.00
1 clerk..... 1,200.00	3 clerks, at \$1,200 each..... 3,600.00	3 clerks, at \$1,200 each..... 3,600.00
2 clerks, at \$1,000 each..... 2,000.00	3 clerks, at \$1,000 each..... 3,000.00	4 clerks, at \$900 each..... 3,600.00
3 clerks, at \$900 each..... 2,700.00	1 copyist..... 840.00	1 copyist..... 840.00
1 messenger boy..... 600.00	1 messenger boy..... 450.00	1 messenger boy..... 450.00
11,300.00	14,890.00	14,890.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
Salaries, Office of Chief of Weather Bureau, \$196,990—Continued. The above force performed the following duties—Con. Publications Division (charge of the printing of weather maps, bulletins, forms, Monthly Weather Review, and other publications): 1 chief of division..... \$2,000.00 1 clerk..... 1,800.00 2 assistant foremen of division, at \$1,600 each..... 3,200.00 1 clerk..... 1,400.00 1 proof reader..... 1,400.00 1 lithographer..... 1,300.00 10 compositors, at \$1.250 each..... 12,500.00 2 pressmen, at \$1,250 each..... 2,500.00 3 lithographers, at \$1,200 each..... 3,600.00 1 clerk..... 1,200.00 1 engineer..... 1,200.00 1 clerk..... 1,000.00 1 skilled mechanic..... 1,000.00 2 skilled artisans, at \$840 each..... 1,680.00 5 folders and feeders, at \$720 each..... 3,600.00 3 firemen, at \$720 each..... 2,160.00 1 laborer..... 720.00 1 messenger..... 720.00 2 laborers, at \$660 each..... 1,320.00 3 folders and feeders, at \$630 each..... 1,890.00 2 messengers, at \$600 each..... 1,200.00 47,390.00 Records Division (charge of the checking and compiling of meteorological data): *1 professor of meteorology in charge..... 3,000.00 1 clerk..... 1,800.00 2 clerks, at \$1,400 each..... 2,800.00 6 clerks, at \$1,200 each..... 7,200.00 3 clerks, at \$1,000 each..... 3,000.00 2 clerks, at \$900 each..... 1,800.00 1 copyist..... 840.00 1 copyist..... 720.00 1 messenger..... 600.00 21,760.00 Supplies Division (charge of the purchasing and issuing of supplies): 1 chief of division..... 2,000.00 2 clerks, at \$1,400 each..... 2,800.00 3 clerks, at \$1,200 each..... 3,600.00 1 clerk..... 1,000.00 1 skilled artisan..... 840.00 1 laborer..... 660.00 1 messenger..... 660.00 11,560.00 Telegraph Division (charge of the maintenance and repair of telegraph lines owned by the Weather Bureau, and the transmission and checking of all telegraph and telephone messages. Seven of the clerks in this division are also skilled operators, who daily receive and transmit the messages, reports, etc., required in the forecast and warning work at Washington): 1 chief of division..... 2,000.00 1 clerk..... 1,800.00 1 clerk..... 1,600.00 2 clerks, at \$1,400 each..... 2,800.00 2 clerks, at \$1,200 each..... 2,400.00 2 clerks, at \$1,000 each..... 2,000.00 1 messenger boy..... 600.00 1 messenger boy..... 450.00 13,650.00 Total..... 221,640.00 * Paid from "Salaries, station employees, Weather Bureau"..... 22,150.00 † Paid from "Salaries, Division of Accounts and Disbursements"..... 2,500.00 24,650.00	Salaries, Office of Chief of Weather Bureau, \$202,510—Continued. The above force is performing the following duties—Cont'd. Publication Division: 1 chief of division..... \$2,000.00 2 assistant foremen of division, at \$1,600 each..... 3,200.00 1 proof reader..... 1,400.00 1 lithographer..... 1,300.00 10 compositors, at \$1.250 each..... 12,500.00 2 pressmen, at \$1,250 each..... 2,500.00 3 lithographers, at \$1,200 each..... 3,600.00 1 skilled mechanic..... 1,000.00 1 skilled artisan..... 840.00 5 folders and feeders, at \$720 each..... 3,600.00 1 messenger..... 720.00 1 laborer..... 660.00 3 folders and feeders, at \$630 each..... 1,890.00 1 laborer..... 600.00 35,810.00 Distributing Division (name changed from Records Division, July 1, 1908): *1 chief of division..... 2,750.00 1 clerk..... 1,800.00 1 clerk..... 1,400.00 5 clerks, at \$1,200 each..... 6,000.00 3 clerks, at \$1,000 each..... 3,000.00 1 laborer..... 720.00 1 messenger..... 600.00 16,270.00 Supplies Division: 1 chief of division..... 2,000.00 1 clerk..... 1,600.00 1 clerk..... 1,400.00 3 clerks, at \$1,200 each..... 3,600.00 1 skilled mechanic..... 1,000.00 1 laborer..... 660.00 1 messenger..... 480.00 10,740.00 Telegraph Division: 1 chief of division..... 2,000.00 1 clerk..... 1,600.00 3 clerks, at \$1,400 each..... 4,200.00 1 clerk..... 1,200.00 2 clerks, at \$1,000 each..... 2,000.00 1 clerk..... 900.00 2 messenger boys, at \$600 each..... 1,200.00 13,100.00 Total..... 222,760.00 * Paid from "Salaries, station employees, Weather Bureau"..... 17,750.00 † Paid from "Salaries, Division of Accounts and Disbursements"..... 2,500.00 20,250.00	Salaries, Office of Chief of Weather Bureau, \$204,310—Continued. The above force will perform the following duties—Cont'd. Publication Division: 1 chief of division..... \$2,000.00 2 assistant foremen of division, at \$1,600 each..... 3,200.00 1 proof reader..... 1,400.00 1 lithographer..... 1,300.00 10 compositors, at \$1.250 each..... 12,500.00 2 pressmen, at \$1,250 each..... 2,500.00 3 lithographers, at \$1,200 each..... 3,600.00 1 skilled mechanic..... 1,000.00 1 skilled artisan..... 840.00 5 folders and feeders, at \$720 each..... 3,600.00 1 messenger..... 720.00 1 laborer..... 660.00 3 folders and feeders, at \$630 each..... 1,890.00 1 laborer..... 600.00 35,810.00 Distributing Division: 1 chief of division..... 2,750.00 1 clerk..... 1,800.00 1 clerk..... 1,400.00 5 clerks, at \$1,200 each..... 6,000.00 3 clerks, at \$1,000 each..... 3,000.00 1 laborer..... 720.00 1 messenger..... 600.00 16,270.00 Supplies Division: 1 chief of division..... 2,000.00 1 clerk..... 1,600.00 1 clerk..... 1,400.00 3 clerks, at \$1,200 each..... 3,600.00 1 skilled mechanic..... 1,000.00 1 laborer..... 660.00 1 messenger..... 480.00 10,740.00 Telegraph Division: 1 chief of division..... 2,000.00 1 clerk..... 1,600.00 3 clerks, at \$1,400 each..... 4,200.00 1 clerk..... 1,200.00 2 clerks, at \$1,000 each..... 2,000.00 1 clerk..... 900.00 2 messenger boys, at \$600 each..... 1,200.00 13,100.00 Total..... 224,560.00 * Paid from "Salaries, station employees, Weather Bureau"..... 17,750.00 † Paid from "Salaries, Division of Accounts and Disbursements"..... 2,500.00 20,250.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Fuel, lights, and repairs, Weather Bureau, \$10,000.</i>	<i>Fuel, lights, and repairs, Weather Bureau, \$10,000.</i>	<i>Contingent expenses, Weather Bureau, \$25,000.</i>
Fuel..... \$3,396.12	Fuel..... \$3,800.00	Fuel..... \$3,800.00
Gas..... 332.90	Gas..... 335.00	Gas..... 335.00
Hauling ashes, rubbish, etc..... 146.55	Hauling ashes, rubbish, etc..... 150.00	Hauling ashes, rubbish, etc..... 150.00
Rent of fire-alarm boxes..... 50.00	Rent of fire-alarm boxes..... 50.00	Rent of fire-alarm boxes..... 50.00
Repairs to buildings and care of grounds..... 5,958.58	Repairs to buildings and care of grounds..... 5,665.00	Repairs to buildings and care of grounds..... 5,665.00
Total expenditures to September 30, 1908..... 9,884.15		New engine and improvement of heating and power plant..... 4,000.00
Balance to be turned back into Treasury..... 115.85		Stationery, blank books, etc..... 2,000.00
Total amount of above appropriation..... 10,000.00	Total amount of appropriation (no increase over 1908)..... 10,000.00	Miscellaneous supplies..... 4,200.00
<i>Contingent expenses, Weather Bureau, \$10,000.</i>	<i>Contingent expenses, Weather Bureau, \$10,000.</i>	Furniture, carpet, etc..... 1,800.00
Stationery, blank books, etc..... 1,800.00	Stationery, blank books, etc..... 2,000.00	Freight and express..... 230.00
Miscellaneous supplies..... 3,513.25	Miscellaneous supplies..... 4,200.00	Rent of telephones, etc..... 500.00
Furniture, carpets, etc..... 1,785.78	Furniture, carpets, etc..... 1,800.00	Apparatus, instruments, laboratory material, etc..... 880.00
Freight and express..... 265.30	Freight and express..... 230.00	Forage..... 325.00
Rent of telephones, etc..... 482.20	Rent of telephones, etc..... 500.00	Purchase of and repairs to wagons, harness, etc..... 700.00
Apparatus, instruments, laboratory material, etc..... 685.16	Apparatus, instruments, laboratory material, etc..... 880.00	Advertising..... 50.00
Forage..... 315.82	Forage..... 325.00	Ice..... 240.00
Purchase of horses (1)..... 369.43	Purchase of and repairs to wagons, harness, etc..... 700.00	Washing towels..... 75.00
Repairs to wagons, harness, etc..... 241.82	Advertising..... 50.00	
Ice..... 63.86	Ice..... 240.00	Total amount estimated (being an increase of \$1,000 over the combined appropriation for fuel, lights, and repairs and for contingent expenses for 1909)..... 25,000.00
Washing towels..... 63.86	Washing towels..... 75.00	
Total expenditures to September 30, 1908..... 9,772.62	Total amount of appropriation (an increase over 1908 of \$1,000)..... 11,000.00	NOTE.—Fuel, lights, and repairs, combined with contingent expenses.
Outstanding liabilities on September 30..... 36.22		<i>General expenses, Weather Bureau, \$1,412,950.</i>
Balance to be turned back in Treasury..... 191.16		Salaries in Washington—
Total amount of above appropriation..... 10,000.00		5 professors of meteorology, at \$3,000 each..... 15,000.00
<i>Salaries, station employees, Weather Bureau, \$551,550.</i>	<i>Salaries, station employees, Weather Bureau, \$586,750.</i>	1 chief distributing division..... 2,750.00
In Washington—	In Washington—	17,750.00
6 professors of meteorology, at \$3,000 each..... 18,000.00	5 professors of meteorology, at \$3,000 each..... 15,000.00	
1 chief, Climatological Division, at \$2,750..... 2,750.00	1 chief distributing division..... 2,750.00	Salaries at regular stations out of Washington—
1 observer..... 1,366.67		1 professor of meteorological physics..... 3,000.00
22,116.67	17,750.00	3 professors of meteorology, at \$3,000 each..... 9,000.00
Out of Washington—	Out of Washington—	1 professor of meteorology..... 2,500.00
1 professor of meteorological physics..... 3,000.00	1 professor of meteorological physics..... 3,000.00	2 inspectors, at \$2,500 each..... 5,000.00
2 professors of meteorology, at \$3,000 each..... 6,000.00	3 professors of meteorology, at \$3,000 each..... 9,000.00	6 district forecasters, at \$2,400 each..... 14,400.00
2 inspectors, at \$2,500 each..... 4,312.50	1 professor of meteorology..... 2,500.00	each..... 14,400.00
6 district forecasters, at \$2,400 each..... 14,400.00	2 inspectors, at \$2,500 each..... 5,000.00	1 research director..... 2,000.00
1 research director, at \$2,000..... 1,833.33	6 district forecasters, at \$2,400 each..... 14,400.00	2 research observers, at \$1,400 each..... 2,800.00
2 research observers, at \$1,400 each..... 2,800.00	1 research director..... 2,000.00	4 local forecasters, at \$2,000 each..... 8,000.00
4 local forecasters, at \$2,000 each..... 8,000.00	2 research observers, at \$1,400 each..... 2,800.00	7 local forecasters, at \$1,800 each..... 12,600.00
7 local forecasters, at \$1,800 each..... 12,600.00	4 local forecasters, at \$2,000 each..... 8,000.00	10 local forecasters, at \$1,600 each..... 16,000.00
10 local forecasters, at \$1,600 each..... 16,000.00	7 local forecasters, at \$1,800 each..... 12,600.00	35 local forecasters, at \$1,400 each..... 49,000.00
35 local forecasters, at \$1,400 each..... 48,886.11	10 local forecasters, at \$1,600 each..... 16,000.00	3 section directors, at \$2,000 each..... 6,000.00
3 section directors, at \$2,000 each..... 5,633.33	35 local forecasters, at \$1,400 each..... 49,000.00	13 section directors, at \$1,800 each..... 23,400.00
11 section directors, at \$1,800 each..... 23,400.00	3 section directors, at \$2,000 each..... 6,000.00	10 section directors, at \$1,600 each..... 16,000.00
9 section directors, at \$1,600 each..... 14,400.00	13 section directors, at \$1,800 each..... 23,400.00	9 section directors, at \$1,400 each..... 12,600.00
10 section directors, at \$1,400 each..... 14,000.00	10 section directors, at \$1,600 each..... 16,000.00	1 section director..... 1,000.00
1 section director, at \$1,000..... 500.00	9 section directors, at \$1,400 each..... 12,600.00	95 observers, at \$1,200 each..... 114,000.00
90 observers, at \$1,200 each..... 105,054.67	1 section director..... 1,000.00	78 assistant observers, at \$1,000 each..... 78,000.00
88 assistant observers, at \$1,000 each..... 88,000.00	95 observers, at \$1,200 each..... 114,000.00	81 assistant observers, at \$840 each..... 68,040.00
70 assistant observers, at \$840 each..... 58,800.00	78 assistant observers, at \$1,000 each..... 78,000.00	30 assistant observers, at \$720 each..... 21,600.00
26 assistant observers, at \$720 each..... 18,720.00	81 assistant observers, at \$840 each..... 68,040.00	1 operator..... 1,000.00
1 operator..... 1,000.00	30 assistant observers, at \$720 each..... 21,600.00	1 expert in vessel reporting..... 840.00
1 expert in vessel reporting..... 840.60	1 operator..... 1,000.00	11 printers, at \$1,200 each..... 13,200.00
9 printers, at \$1,200 each..... 10,800.00	1 expert in vessel reporting..... 840.00	16 printers, at \$1,000 each..... 16,000.00
15 printers, at \$1,000 each..... 15,000.00	11 printers, at \$1,200 each..... 13,200.00	1 skilled mechanic..... 1,200.00
1 skilled mechanic..... 1,200.00	16 printers, at \$1,000 each..... 16,000.00	2 repairmen, at \$840 each..... 1,680.00
1 repairman..... 840.00	1 skilled mechanic..... 1,200.00	7 repairmen, at \$720 each..... 5,040.00
8 repairmen, at \$720 each..... 5,760.00	2 repairmen, at \$840 each..... 1,680.00	1 unclassified laborer..... 720.00
1 unclassified laborer..... 600.00	7 repairmen, at \$720 each..... 5,040.00	1 unclassified laborer..... 720.00
2 unclassified laborers, at \$480 each..... 960.00	1 unclassified laborer..... 720.00	1 unclassified laborer..... 480.00
3 station agents, at \$300 each..... 900.00	1 unclassified laborer..... 720.00	1 unclassified laborer..... 240.00
6 student assistants, at \$300 each..... 1,800.00	1 unclassified laborer..... 480.00	3 station agents, at \$300 each..... 900.00
3 messengers, at \$720 each..... 2,160.00	1 unclassified laborer..... 240.00	8 student assistants, at \$300 each..... 2,400.00
12 messengers, at \$600 each..... 7,200.00	3 station agents, at \$300 each..... 900.00	5 messengers, at \$720 each..... 3,600.00
38 messengers, at \$480 each..... 17,240.00	8 student assistants, at \$300 each..... 2,400.00	12 messengers, at \$600 each..... 7,200.00
60 messengers, at \$360 each..... 20,723.45	5 messengers, at \$720 each..... 3,600.00	47 messengers, at \$480 each..... 22,560.00
Miscellaneous employees (temporary and unassigned)..... 3,533.41	12 messengers, at \$600 each..... 7,200.00	50 messengers, at \$360 each..... 18,000.00
528,429.32	47 messengers, at \$480 each..... 22,560.00	2 evaporation observers, at \$1,515 each..... 3,130.00
Total expenditures to September 30, 1908..... 550,545.99	50 messengers, at \$360 each..... 18,000.00	3 evaporation observers, at \$626 each..... 1,878.00
Outstanding liabilities on September 30..... 113.89	2 evaporation observers, at \$1,515 each..... 3,130.00	For temporary assistance..... 2,672.00
Balance to be turned back in Treasury..... 890.12	3 evaporation observers, at \$626 each..... 1,878.00	
Total amount of above appropriation..... 551,550.00	For temporary assistance..... 2,672.00	597,000.00
	Total of appropriation (an increase over 1908 of \$35,200)..... 586,750.00	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, station employees, Weather Bureau, \$551,550—Continued.</i>	<i>Salaries station employees, Weather Bureau, \$586 750—Continued.</i>	<i>General expenses, Weather Bureau, \$1,412,950—Continued.</i>
The employees on duty in Washington who were paid from the above-named appropriation were assigned to the various divisions and sections as indicated in the foregoing pages.	The employees on duty in Washington who are being paid from the above-named appropriation are assigned to the various divisions and sections as indicated in the foregoing pages.	The employees on duty in Washington who are to be paid from the above-named appropriation will be assigned to the various divisions and sections indicated in the foregoing pages.
The employees outside of Washington who were paid from the same appropriation were assigned to the 206 stations located throughout the United States, the West Indies, and the Hawaiian Islands.	The employees outside of Washington who are being paid from the same appropriation are assigned to the 206 stations located throughout the United States, the West Indies, and the Hawaiian Islands.	The employees outside of Washington who are to be paid from the same appropriation will be assigned to the 209 stations located throughout the United States, the West Indies, and the Hawaiian Islands.
General expenses, Weather Bureau, \$645,000:	General expenses, Weather Bureau, \$852,000:	Miscellaneous:
Stationery.....\$31,755.06	Stationery.....\$40,000.00	Stationery.....\$40,000.00
Miscellaneous supplies, services, etc.....74,957.84	Miscellaneous supplies, services, etc.....78,650.00	Miscellaneous supplies, services, etc.....83,650.00
Furniture.....9,208.40	Furniture.....10,000.00	Furniture.....10,000.00
Fuel.....6,113.34	Fuel.....7,000.00	Fuel.....7,000.00
Freight.....2,816.85	Freight.....7,000.00	Freight.....7,000.00
Express.....904.25	Express.....3,000.00	Express.....3,000.00
Telegraphing, telephoning, and cabling circuit reports.....75,240.00	Telegraphing, telephoning, and cabling circuit reports.....83,000.00	Telegraphing, telephoning, and cabling circuit reports.....85,000.00
Forecasts, warnings, observations, etc.....109,100.70	Forecasts, warnings, observations, etc.....150,000.00	Forecasts, warnings, observations, etc.....155,000.00
Rent of telephones.....17,114.95	Rent of telephones.....18,000.00	Rent of telephones.....18,000.00
Rent of offices, etc.....66,195.95	Rent of offices, etc.....80,000.00	Rent of offices, etc.....80,000.00
Gas and electricity.....4,613.54	Gas and electricity.....5,000.00	Gas and electricity.....5,000.00
Traveling, and station and field expenses.....24,680.82	Traveling, and station and field expenses.....30,000.00	Traveling, and station and field expenses.....30,000.00
Instruments, apparatus, etc.....22,371.39	Instruments, apparatus, etc.....25,000.00	Instruments, apparatus, etc.....25,000.00
Maintenance and repair of telegraph lines.....3,506.71	Maintenance and repair of telegraph lines.....5,000.00	Maintenance and repair of telegraph lines.....5,000.00
Repairs to buildings.....8,116.50	Repairs to buildings.....9,000.00	Repairs to buildings.....9,000.00
Printing office (in Washington).....17,871.11	Completion of physical laboratory building and office and cottage building at Mount Weather, Va.....60,000.00	For observatory buildings and sites.....105,000.00
Printing and binding.....5,410.01	Erection of main observatory building and heating station at Mount Weather, Va.....60,000.00	Evaporation investigations.....12,000.00
Pay for river and rainfall observations.....28,106.08	For seven observatory buildings and sites: Abilene, Tex.; Canton, N. Y.; Dodge City, Kans.; Lansing, Mich.; Northfield, Vt.; Richmond, Va., and St. Joseph, Mo.....105,000.00	Printing office (in Washington).....30,000.00
Pay for snow and ice observations.....82.00	For the reestablishment of the Weather Bureau station at Pikes Peak, Colo.....5,000.00	Printing and binding.....6,000.00
Pay for climatological and crop observations.....13,697.80	Evaporation investigations.....12,000.00	Pay for river and rainfall observations.....30,000.00
Pay for storm and hurricane displaymen.....16,149.57	Printing office (in Washington).....30,000.00	Pay for snow and ice observations.....150.00
Pay for cranberry observations.....160.00	Printing and binding.....6,000.00	Pay for climatological and crop observations.....34,200.00
	Pay for river and rainfall observations.....30,000.00	Pay for storm and hurricane displaymen.....18,000.00
	Pay for snow and ice observations.....150.00	Pay for cranberry observations.....200.00
	Pay for climatological and crop observations.....20,000.00	
	Pay for storm and hurricane displaymen.....18,000.00	
	Pay for cranberry observations.....200.00	
		798,200.00
Expenditures to September 30, 1908.....538,192.87	Total of appropriation (an increase over 1908 of \$207,000).....852,000.00	Total amount estimated (a decrease from 1909 of \$25,800 under the combined appropriations for "Salaries, station employees" and "general expenses").....1,412,950.00
Outstanding liabilities on September 30, 1908 (estimated).....57,058.17		
Balance to be turned back in Treasury (estimated).....49,748.96		
Total of above appropriation.....645,000.00		

NOTE.—The above expenditures, classified in accordance with the suggestion of the Congressional Committee on Expenditures for this department, were necessary in prosecuting the important work of the Weather Bureau. This work fell naturally under the following projects:

PROJECTS.

The general work of the Weather Bureau outside of Washington was carried on under the authority contained in two appropriations, viz: Salaries, Weather Bureau, from which all commissioned and temporary employees were paid; and general expenses, Weather Bureau, from which all other expenses were paid. The commissioned employees were located at 206 stations, the majority of which served as centers for the prosecution of forecast, climatological, crop, river, and flood work, etc., in the surrounding sections. The official in charge and the employees under him were engaged in the performance of the various lines of work that were carried on at each station. This work has been divided into projects, which are hereafter described. As an illustration: The official in charge of the station at New Orleans is in

NOTE.—The above expenditures, classified in accordance with the suggestion of the Congressional Committee on Expenditures for this department, are being incurred in prosecuting the important work of the Weather Bureau. This work falls naturally under the following projects:

PROJECTS.

NOTE.—"Salaries, station employees," combined with "General expenses."

NOTE.—The above expenditures, classified in accordance with the suggestion of the Congressional Committee on Expenditures for this department, have been submitted as necessary for prosecuting the important work of the Weather Bureau. This work will fall naturally under the following projects:

PROJECTS.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910. and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (§4 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
Salaries, station employees, Weather Bureau, \$551,550—Continued.	Salaries, station employees, Weather Bureau, \$586,750—Continued.	General expenses, Weather Bureau, \$1,412,960—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
charge of the climatological work for the State of Louisiana, the forecasting for stages for the rivers within the State, the taking and recording of observations, the issuing of daily weather and temperature forecasts, the making of frost and cold-wave forecasts for several States, the dissemination of storm and hurricane warnings, the collection and dissemination of special meteorological crop observations, ocean meteorological observations, the printing and issuing of weather maps, bulletins, forecast cards, etc. All of this work is done by the official in charge and his corps of assistants, much of it being done simultaneously, the total time devoted to any one project varying from day to day according to existing weather conditions. The whole work is done in the same office, using the same furniture, stationery, and having a common expense for fuel, gas, electricity, etc. The work is so coordinated as to accomplish the greatest amount with the least expense, but the impracticability of determining an accurate cost of rent, gas, electricity, fuel, stationery, furniture, and other miscellaneous expenses, and the exact salary cost for each line of work is evident. The condition at New Orleans is typical of other stations. Therefore the cost indicated for each project has been approximated, but it is reasonably correct.		
(1) Administration (in Washington), Willis L. Moore, Chief of Bureau:	(1) Administration (in Washington), Willis L. Moore, Chief of Bureau:	(1) Administration (in Washington), Willis L. Moore, Chief of Bureau:
Salaries in Washington.....\$109,262.33	Salaries in Washington.....\$124,410.00	Salaries in Washington.....\$126,410.00
Traveling and field expenses.....534.53	Traveling and field expenses...800.00	Traveling and field expenses...800.00
Fuel, lights, repairs, supplies, etc.....19,692.99	Fuel, lights, repairs, supplies, etc.....21,000.00	Fuel, lights, repairs, supplies, etc.....25,000.00
129,489.85	146,410.00	152,210.00
(2) The Monthly Weather Review, Cleveland Abbe, professor of meteorology (Washington), editor:	(2) The Monthly Weather Review, Cleveland Abbe, professor of meteorology (Washington), editor:	(2) The Monthly Weather Review, Cleveland Abbe, professor of meteorology (Washington), editor:
A summary of the weather of the month and the year, showing average temperature and other climatological data for about 3,600 land stations in the United States. The aim is to present the meteorological conditions for each month so that the weather of any part of the United States can be easily compared with that of any other, or with any portion of the world.		
Salaries.....13,700.00	Salaries.....14,000.00	Salaries.....14,000.00
Traveling and field expenses.....20.50	Traveling and field expenses...100.00	Traveling and field expenses...100.00
Paper, etc.....3,005.20	Paper, etc.....5,000.00	Paper, etc.....5,000.00
16,725.70	19,100.00	19,100.00
(3) Forecast work, Edward B. Garriott, professor of meteorology (Washington), in charge:	(3) Forecast work Edward B. Garriott, professor of meteorology (Washington), in charge:	(3) Forecast work, Edward B. Garriott, professor of meteorology (Washington), in charge:
(a) Weather and temperature forecasts: Made twice daily for all States; based upon observations of meteorological conditions made at about 230 stations in the United States, the West Indies, Hawaiian Islands, Alaska, the Azores, Iceland, Canada, and a few points in Europe and Asia.		
(b) Storm warnings: Warnings of storms likely to imperil shipping, distributed by telegraph, telephone, and other expeditious means to all ports on the Atlantic, Pacific, and Gulf seacoasts, and Great Lakes that are within the threatened zone.		
(c) Cold waves: Advices of coming of cold waves given in threatened districts twelve to thirty-six hours in advance by means of telegraph, telephone, mail, flag signals, etc.		
(d) Frost warnings: Issued during crop-growing seasons in the interest of fruit, truck, tobacco, and other growers.		
(e) Hurricane warnings: Special advices to threatened districts on Atlantic and Gulf coasts of approach of West Indian hurricanes.		
(f) Heavy snow warnings: For the benefit of transportation lines both in and out of cities.		
(g) The daily distribution of forecasts and meteorological information by maps, bulletins, forecast cards, etc.		
Salaries.....355,029.97	Salaries.....360,000.00	Salaries.....378,000.00
Traveling and field expenses.....10,755.76	Traveling and field expenses...8,500.00	Traveling and field expenses...8,500.00
Miscellaneous supplies and expenses.....272,339.50	Miscellaneous supplies and expenses.....360,000.00	Miscellaneous supplies and expenses.....360,000.00
638,125.23	728,500.00	746,500.00
(4) River and flood service, Harry A. Frankenfield, professor of meteorology (Washington), in charge:	(4) River and flood service, Harry A. Frankenfield, professor of meteorology (Washington), in charge:	(4) River and flood service, Harry A. Frankenfield, professor of meteorology (Washington), in charge:
For the staging of rivers, and the issuing of daily forecasts of water stages and of flood warnings in the interest of commerce and navigation, and for the saving of life and property.		
Salaries.....61,653.61	Salaries.....63,000.00	Salaries.....68,600.00
Traveling and field expenses.....2,370.57	Traveling and field expenses...1,500.00	Traveling and field expenses...1,500.00
Miscellaneous supplies and expenses.....36,324.95	Miscellaneous supplies and expenses.....40,000.00	Miscellaneous supplies and expenses.....40,000.00
100,349.13	104,500.00	110,100.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, station employees, Weather Bureau, \$551,550—Continued.</i>	<i>Salaries, station employees, Weather Bureau, \$586,750—Continued.</i>	<i>General expenses, Weather Bureau, \$1,412,950—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(5) Cranberry marsh investigations, Henry J. Cox, professor of meteorology (Chicago), in charge:	(5) Cranberry marsh investigations, Henry J. Cox, professor of meteorology (Chicago), in charge:	(5) Cranberry marsh investigations, Henry J. Cox, professor of meteorology (Chicago), in charge:
Conducted in the marshes of Wisconsin for the purpose of improving frost warnings for benefit of this industry, which is peculiarly subject to damage by frost.		
Salaries..... \$460.00	Salaries..... \$500.00	Salaries..... \$500.00
Traveling and field expenses..... 150.00	Traveling and field expenses..... 150.00	Traveling and field expenses..... 150.00
Miscellaneous supplies and expenses..... 250.00	Miscellaneous supplies and expenses..... 200.00	Miscellaneous supplies and expenses..... 200.00
<u>\$860.00</u>	<u>\$850.00</u>	<u>\$850.00</u>
(6) Climatological and crop work, James Berry, chief of division (Washington), in charge:	(6) Climatological work, Frank H. Bigelow, professor of meteorology (Washington), in charge:	(6) Climatological work, Frank H. Bigelow, professor of meteorology (Washington), in charge:
(a) Climatological work: Establishing the climatology of the United States by means of meteorological observations taken at regular stations, and by about 3,600 cooperative observers located in each county of the United States. The data for each State is collected monthly at a regular station designated as the state center, and published in quarto size.		
(b) Meteorological crop reports: Special observations of weather, precipitation, and temperature taken at about 290 places in the cereal and cotton belts and telegraphed daily to district centers, where they are issued in bulletin form, for the benefit of the corn, cotton, sugar, rice, and wheat interests. Weekly bulletins, giving the summary of weather conditions for the preceding week that have had marked bearing on crops, are printed and issued from each state center.		
Salaries..... 108,452.26	Salaries..... 120,000.00	Salaries..... 139,200.00
Traveling and field expenses..... 3,653.61	Traveling and field expenses..... 2,500.00	Traveling and field expenses..... 2,500.00
Miscellaneous supplies and expenses..... 67,513.24	Miscellaneous supplies and expenses..... 100,000.00	Miscellaneous supplies and expenses..... 100,000.00
<u>179,619.11</u>	<u>222,500.00</u>	<u>241,700.00</u>
(7) Ocean meteorology, Henry L. Heiskell, chief of division (Washington), in charge:	(7) Marine meteorology, Henry L. Heiskell, chief of division (Washington), in charge:	(7) Marine meteorology, Henry L. Heiskell, chief of division (Washington), in charge:
(a) Ocean meteorology work: The collection of meteorological and physical information pertaining to the oceans for vessels of war, commerce, etc.; plotting the data on daily synoptic charts, etc.; and the preparation of data for use in the monthly pilot charts of the Atlantic and Pacific oceans, issued by the Hydrographic Office.		
(b) Vessel reporting: The arrival and departure of passing vessels for the benefit of commerce and navigation at certain stations located on the Atlantic, Gulf, and Pacific coasts.		
Salaries..... 16,788.76	Salaries..... 14,000.00	Salaries..... 14,000.00
Traveling and field expenses..... 250.00	Traveling and field expenses..... 100.00	Traveling and field expenses..... 100.00
Miscellaneous supplies and expenses..... 800.00	Miscellaneous supplies and expenses..... 300.00	Miscellaneous supplies and expenses..... 300.00
<u>17,838.76</u>	<u>14,400.00</u>	<u>14,400.00</u>
(8) Research observatory, Alfred J. Henry, professor of meteorology (Mount Weather, Va.), in charge:	(8) Research observatory, Alfred J. Henry, professor of meteorology (Mount Weather, Va.), in charge:	(8) Research observatory, Alfred J. Henry, professor of meteorology (Mount Weather, Va.), in charge:
For conducting meteorological observations for the improvement of weather forecasts, warnings, etc.:		
(a) Meteorological observation station work.		
(b) Studies of the atmosphere at the surface of the earth and at various altitudes; determinations of its temperature, moisture, content, pressure, state of electrification, direction and magnitude of its movements, its cloudiness, dust content, absorption of light, of heat, and of electric waves, and its various other properties.		
(c) Solar investigations, involving a careful measurement of the insolation or amount of solar energy reaching the earth in a unit of time, the size and distribution of sun spots, faculae, and prominences; and an especial effort to detect all changes in the registered amounts of the solar energy, and a careful effort to refer these changes to their real causes, whether of terrestrial or of solar origin.		
(d) Terrestrial magnetism: A study of the regular and of the irregular changes in the magnitude and direction of the earth's magnetic force, in connection with other terrestrial phenomena and with solar activities of all kinds.		
(e) Laboratory investigations: The reproduction under controllable conditions of various meteorological phenomena and experiments that may aid in explaining the origin and laws of weather conditions; also the construction and standardizing of certain apparatus.		
Salaries..... 16,180.00	Salaries..... 18,000.00	Salaries..... 20,000.00
Traveling and field expenses..... 783.35	Traveling and field expenses..... 600.00	Traveling and field expenses..... 600.00
Miscellaneous supplies, apparatus, etc..... 13,000.00	Miscellaneous supplies, apparatus, etc..... 20,000.00	Miscellaneous supplies, apparatus, etc..... 20,000.00
<u>29,963.35</u>	<u>38,600.00</u>	<u>40,600.00</u>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, station employees, Weather Bureau, \$551,550—Continued.</i>	<i>Salaries station employees, Weather Bureau, \$586,750—Continued.</i>	<i>General expenses, Weather Bureau, \$1,412,950—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(9) Instruments, Charles F. Marvin, professor of meteorology (Washington), in charge: Testing, comparing, devising, and making the delicate and dependable instruments that are required in practical and scientific meteorological work.	(9) Instruments, Charles F. Marvin, professor of meteorology (Washington), in charge:	(9) Instruments, Charles F. Marvin, professor of meteorology (Washington), in charge:
Salaries..... \$24,528.64	Salaries..... \$25,000.00	Salaries..... \$26,000.00
Traveling and field expenses..... 431.01	Traveling and field expenses... 200.00	Traveling and field expenses... 200.00
Miscellaneous supplies and expenses..... 25,135.56	Miscellaneous supplies and expenses..... 16,000.00	Miscellaneous supplies and expenses..... 16,000.00
50,095.21	41,200.00	42,200.00
(10) Inspection of stations, Norman B. Conger, inspector (Detroit, Mich.); Henry B. Hersey, inspector (Milwaukee, Wis.): Two officials who are charged with the inspection of the personnel, records, and service at the 206 regular stations of the bureau.	(10) Inspection of stations, Norman B. Conger, inspector (Detroit, Mich.); Henry B. Hersey, inspector (Milwaukee, Wis.):	(10) Inspection of stations, Norman B. Conger, inspector (Detroit, Mich.); Henry B. Hersey, inspector (Milwaukee, Wis.):
Salaries..... 1,366.67	Salaries..... 5,000.00	Salaries..... 5,000.00
Traveling and field expenses..... 1,272.12	Traveling and field expenses... 1,500.00	Traveling and field expenses... 1,500.00
2,638.79	6,500.00	6,500.00
(11) Telegraph service, Jesse H. Robinson, chief of division (Washington), in charge: The collection and dissemination of observations, reports, forecasts, warnings, etc., including the maintenance and repair of telegraph and cable lines. The Weather Bureau operates several government telegraph and cable lines, which are maintained for the securing of meteorological observations and in the interest of navigation, including the reporting of wrecks and marine casualties. The cost of the telegraph tolls and messages has been apportioned to the various projects to which it applied.	(11) Telegraph service, Jesse H. Robinson, chief of division (Washington), in charge:	(11) Telegraph service, Jesse H. Robinson, chief of division (Washington), in charge:
Salaries..... 19,946.79	Salaries..... 20,500.00	Salaries..... 21,500.00
Traveling and field expenses..... 2,155.63	Traveling and field expenses... 500.00	Traveling and field expenses... 500.00
Miscellaneous supplies and expenses..... 200.00	Miscellaneous supplies and expenses..... 2,000.00	Miscellaneous supplies and expenses..... 2,000.00
22,302.42	23,000.00	24,000.00
(12) Records, Frank H. Bigelow, professor of meteorology (Washington), in charge: Taking observations, correcting and compiling the meteorological records made by the bureau at all regular stations.	(12) Records, James Berry, chief of division (Washington), in charge:	(12) Records, James Berry, chief of division (Washington), in charge:
Salaries..... 75,794.57	Salaries..... 80,000.00	Salaries..... 87,400.00
Traveling and field expenses..... 2,324.05	Traveling and field expenses... 400.00	Traveling and field expenses... 400.00
Miscellaneous supplies and expenses..... 28,055.43	Miscellaneous supplies and expenses..... 15,500.00	Miscellaneous supplies and expenses..... 15,500.00
106,174.05	95,900.00	103,300.00
(13) Buildings, Edgar B. Calvert, assistant chief, Division of Accounts (Washington), in charge: The construction and repair of observatory buildings outside of the District of Columbia.	(13) Buildings, Edgar B. Calvert, assistant chief, Division of Accounts (Washington), in charge:	(13) Buildings, Edgar B. Calvert, assistant chief, Division of Accounts (Washington), in charge:
Salaries..... 1,800.00	Salaries..... 3,000.00	Salaries..... 3,000.00
Traveling and field expenses..... 519.69	Traveling and field expenses... 1,000.00	Traveling and field expenses... 1,000.00
Miscellaneous supplies and expenses..... 8,116.50	Repairs to buildings outside of Washington..... 9,000.00	Repairs to buildings outside of Washington..... 9,000.00
	For the completion of the unfinished physical laboratory building and the unfinished cottage and office building at Mount Weather, Va..... 15,000.00	For the erection of observatory buildings..... 105,000.00
	For the erection of main observatory building and central heating station at Mount Weather, Va..... 60,000.00	
	For the erection of observatory buildings at Abilene, Tex., Canton, N. Y., Dodge City, Kans., Lansing, Mich., Northfield, Vt., Richmond, Va., and St. Joseph, Mo..... 105,000.00	
10,436.19	193,000.00	118,000.00
	(14) For the reestablishment of the Weather Bureau station at Pikes Peak, Colo..... 5,000.00	
	(15) Evaporation researches, Frank H. Bigelow, professor of meteorology (Washington), in charge: The overflow of the Colorado River through the irrigation ditches in the Imperial Valley filled the old Salton Basin, 285 feet below sea level, to the depth of 80 feet, before it was brought under control by levees and heading. The Salton Sea now presents a surface of 440 square miles to rapid evaporation in a very dry climate, and the rate of recovery of the valuable sub-	(15) Evaporation researches, Frank H. Bigelow, professor of meteorology (Washington), in charge:

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, station employees, Weather Bureau, \$551,550—Continued.</i>	<i>Salaries, station employees, Weather Bureau, \$586,750—Continued.</i>	<i>General expenses, Weather Bureau, \$1,412,950—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
	merged land is of vital importance. Engineers do not know how to estimate at all accurately the probable rate of evaporation. The entire subject needs careful study, and the Salton Sea affords a unique opportunity to undertake to solve the evaporation problem, and this solution will be invaluable for future work in the arid and subarid regions of the country, especially in constructing reservoirs for irrigation purposes. The evaporation and the rainfall are correlative factors in the supply of water for waterways and for farming generally, but meteorologists have heretofore been limited to the collection of rainfall data only, and there is a lack of knowledge regarding the losses by evaporation. It is one of the gaps in practical science greatly needing to be filled.	
	Salaries..... \$10,000.00	Salaries..... \$10,000.00
	Traveling and field expenses... 800.00	Traveling and field expenses... 800.00
	Miscellaneous supplies and expenses..... 12,000.00	Miscellaneous supplies and expenses..... 12,000.00
	22,800.00	22,800.00
Total of all appropriations for Weather Bureau..... \$1,413,540.00	Total of all appropriations for Weather Bureau (an increase over 1908 of \$248,720).... 1,662,260.00	Total amount estimated for Weather Bureau (a decrease from 1909 of \$20,000)..... \$1,662,260.00
Total expenditures to September 30, 1908..... 1,304,617.79		
Outstanding liabilities on September 30 (estimated).... 57,236.28		
Balance to be turned back in Treasury (estimated)..... 51,685.93		

BUREAU OF ANIMAL INDUSTRY.

<i>Salaries, Bureau of Animal Industry, 1908, \$85,280.</i>	<i>Salaries, Bureau of Animal Industry, 1909, \$83,660.</i>	<i>Salaries, Bureau of Animal Industry, 1910, \$115,100.</i>
Melvin, A. D..... Chief of Bureau, at \$5,000..... \$5,000.00	1 chief of bureau..... \$5,000.00	1 chief of bureau..... \$5,000.00
Jones, E. B..... Chief clerk, at \$2,000..... 2,000.00	1 chief clerk..... 2,000.00	1 chief clerk..... 2,000.00
Abel, Joseph..... Clerk, class four..... 1,800.00	1 editor..... 2,000.00	NOTE.—One editor at \$2,000, transferred to lump fund for general expenses.
Carroll, Charles C..... Clerk, class four..... 1,800.00	4 clerk, class four..... 7,200.00	4 clerks, class four..... 7,200.00
Chase, James L..... Clerk, class four..... 1,800.00	5 clerks, class three..... 8,000.00	5 clerks, class three..... 8,000.00
Pickens, J. M..... Editor, at \$2,000..... 2,000.00	13 clerks, class two..... 18,200.00	16 clerks, class two (increase of 3 by transfer from lump fund for general expenses)..... 22,400.00
Cross, C. H..... Clerk, class three..... 800.00	13 clerks, class one..... 15,600.00	1 clerk (by transfer from lump fund for general expenses)..... 1,300.00
Reynolds, McPherson..... Clerk, class three..... 746.66	8 clerks, at \$1,000 each..... 8,000.00	14 clerks, class one (increase of 1 by transfer from lump fund for general expenses)..... 16,800.00
La Pelle, Zebedee..... Clerk, class three..... 1,600.00	3 clerks, at \$900 each..... 2,700.00	14 clerks, at \$1,000 each (increase of 6 submitted, 3 by transfer from lump fund for general expenses)..... 14,000.00
Newmyer, E. J..... Clerk, class three..... 1,600.00	2 clerks, at \$840 each..... 1,680.00	5 clerks, at \$900 each (increase of 2 by transfer from lump fund for general expenses)..... 4,500.00
Rice, J. A..... Clerk, class three..... 1,600.00	3 clerks, at \$720 each..... 2,160.00	4 clerks, at \$840 each (increase of 2 by transfer from lump fund for general expenses)..... 3,360.00
Roberts, John..... Clerk, class three..... 1,600.00	1 mechanic..... 1,200.00	5 clerks, at \$720 each (increase of 2 by transfer from lump fund for general expenses)..... 3,600.00
Bennett, E. A..... Clerk, class two..... 1,400.00	1 messenger and custodian..... 1,000.00	1 mechanic..... 1,200.00
Cohran, John R..... Clerk, class two..... 1,400.00	1 carpenter..... 1,100.00	1 messenger and custodian..... 1,000.00
Cross, C. H..... Clerk, class two..... 700.00	1 messenger..... 840.00	1 carpenter..... 1,100.00
Haughton, N. F..... Clerk, class two..... 700.00	3 messengers, at \$720 each..... 2,160.00	3 carpenters, at \$900 each (by transfer from lump fund for general expenses)..... 2,700.00
Edsall, H. M..... Clerk, class two..... 1,400.00	1 skilled laborer..... 840.00	1 painter (by transfer from lump fund for general expenses)..... 900.00
Hornbaker, J. N..... Clerk, class two..... 1,400.00	1 skilled laborer..... 720.00	3 messengers, at \$840 each (increase of 2 by transfer from lump fund for general expenses)..... 2,520.00
Housman, Anna M..... Clerk, class two..... 1,400.00	2 skilled laborers, at \$600 each..... 1,200.00	6 messengers, at \$720 each (increase of 3 by transfer from lump fund for general expenses)..... 4,320.00
Johnston, E. C..... Clerk, class two..... 1,400.00	1 skilled laborer..... 660.00	2 messenger boys, at \$480 each (by transfer from lump fund for general expenses)..... 960.00
Magee, R. W..... Clerk, class two..... 233.33	1 illustrator..... 1,400.00	1 skilled laborer..... 840.00
Sartz, R. S. N..... Clerk, class two..... 1,166.67	Total of above appropriation (a decrease from 1908 of \$1,620)..... \$83,660.00	3 skilled laborers, at \$720 each (increase of 2 by transfer from
Moran, Harry E..... Clerk, class two..... 1,400.00		
More, F. C..... Clerk, class two..... 1,400.00		
Myers, Carrie..... Clerk, class two..... 1,400.00		
Price, Harry N..... Clerk, class two..... 1,238.60		
Rogers, Beatrice O..... Clerk, class two..... 1,108.33		
Allen, Burr..... Clerk, class one..... 1,200.00		
Arlitt, John L..... Clerk, class one..... 616.67		
Sartz, R. S. N..... Clerk, class one..... 200.00		
Cartan, M. S..... Clerk, class one..... 336.67		
Haughton, N. F..... Clerk, class one..... 600.00		
Dent, Mary T..... Clerk, class one..... 1,138.34		
Fagan, Mary E..... Clerk, class one..... 1,200.00		
Gibbs, B. H..... Clerk, class one..... 1,200.00		
Gibbs, Henry C..... Clerk, class one..... 1,200.00		
Graves, J. M..... Clerk, class one..... 1,200.00		
Hickey, Edward J..... Clerk, class 1..... 700.00		
Mahon, M. H..... Clerk, class 1..... 1,200.00		
Meyst, F. W..... Clerk, class 1..... 1,200.00		
Russell, George H..... Clerk, class 1..... 213.33		
Stein, S. B..... Clerk, class 1..... 696.67		
Swank, W. R..... Clerk, class 1..... 1,200.00		
Arlitt, John L..... Clerk, at \$1,000..... 416.66		
Bell, Mary E..... Clerk, at \$1,000..... 491.67		
Porter, Harry W..... Clerk, at \$1,000..... 91.67		
Brown, Grace S..... Clerk, at \$1,000..... 477.77		
Polton, Emma R..... Clerk, at \$1,000..... 522.22		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Animal Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
Salaries, Bureau of Animal Industry, 1908, \$85,280—Continued.		
Henderson, Alice..... Clerk, at \$1,000.....	\$583.34	
Hickey, Edward J..... Clerk, at \$1,000.....	416.66	
Simonton, L. J..... Clerk, at \$1,000.....	583.34	
Pirtle, T. R..... Clerk, at \$1,000.....	583.34	
Sumner, Louis C..... Clerk, at \$1,000.....	1,000.00	
Tyson, Fanny..... Clerk, at \$1,000.....	1,000.00	
Walters, Mildred E..... Clerk, at \$1,000.....	1,000.00	
Henderson, Alice..... Clerk, at \$900.....	147.50	
Ormsby, Andrew A..... Clerk, at \$900.....	522.50	
Rapp, Emma V..... Clerk, at \$900.....	900.00	
Jones, Willie W..... Clerk, at \$840.....	840.00	
Simonton, L. J..... Clerk, at \$840.....	350.00	
Wood, Elizabeth J..... Clerk, at \$840.....	350.00	
Johnson, Victorine E..... Clerk, at \$720.....	716.00	
Patton, H. Maria..... Clerk, at \$720.....	654.00	
Phillips, Ella M..... Clerk, at \$720.....	540.00	
Brez, Colman..... Mechanic, at \$1,200.....	900.00	
Brough, William..... Messenger and custodian, at \$1,000.....	166.67	
Stedman, Royal G..... Messenger and custodian, at \$1,000.....	1,000.00	
Thompson, R. E. L..... Carpenter, at \$1,100.....	1,100.00	
Stedman, William P..... Messenger, at \$840.....	840.00	
Mull, R. B..... Messenger, at \$720.....	720.00	
Nicholas, John..... Messenger, at \$720.....	720.00	
Perry, Owen R..... Messenger, at \$720.....	720.00	
Shimoneck, William C..... Messenger, at \$720.....	720.00	
Goetz, Lena B..... Skilled laborer, at \$840.....	840.00	
Cassell, A. C..... Skilled laborer, at \$720.....	720.00	
Perry, J. M..... Skilled laborer, at \$720.....	720.00	
Berlin, S. S..... Skilled laborer, at \$600.....	600.00	
Phillips, Annie E..... Skilled laborer at \$600.....	600.00	
Scheerer, George W..... Skilled laborer, at \$660.....	660.00	
Moffitt, Archie W..... Fireman, at \$720.....	660.00	
Haines, W. S. D..... Illustrator, at \$1,400.....	1,400.00	
Total.....	79,468.61	
Unexpended balance.....	5,811.39	
Total of above appropriation.....	85,280.00	
Administration.....	15,100.82	
Inspection division.....	3,760.00	
Quarantine division.....	1,200.00	
Dairy division.....	7,306.01	
Animal husbandry.....	3,096.67	
Biochemic division.....	2,020.00	
Pathological division.....	7,874.00	
Zoological division.....	3,053.34	
Editorial office.....	6,566.67	
Library.....	2,679.17	
Carpenter shop.....	1,266.67	
Property room.....	4,500.00	
Office of Accounts.....	12,979.43	
Appointment Section.....	4,543.33	
File room.....	3,522.50	
Total.....	79,468.61	
General expenses, Bureau of Animal Industry, 1908, \$892,200.		
Salaries:		
In Washington.....	\$119,419.58	
Out of Washington.....	453,036.79	
Stationery.....	4,057.39	
Miscellaneous supplies and services, equipment, books, machinery, etc.....	59,796.30	
Furniture.....	4,462.07	
Fuel.....	1,344.59	
Freight.....	302.51	
Express.....	837.76	
Telegraph.....	400.11	
Telephone.....	822.43	
Rent.....	8,022.40	
Gas and electricity.....	3,535.74	
Apparatus, instruments and laboratory materials.....	10,896.03	
Travel and station and field expenses.....	209,151.28	
Total expenditures to September 30, 1908.....	876,084.98	
Less repayments to credit of appropriation.....	1,674.55	
Net expenditures to September 30, 1908.....	874,410.43	
Outstanding liabilities September 30, 1908 (estimated).....	9,271.41	
Balance to be turned back to Treasury (estimated).....	8,518.16	
Total amount of above appropriation.....	892,200.00	
Salaries, Bureau of Animal Industry, 1909, \$83,660—Continued.		
Administration.....	\$16,500.00	
Inspection division.....	4,200.00	
Quarantine division.....	1,720.00	
Dairy division.....	7,500.00	
Animal husbandry.....	3,500.00	
Biochemic division.....	2,200.00	
Pathological division.....	7,600.00	
Zoological division.....	3,000.00	
Editorial office.....	6,540.00	
Library.....	2,700.00	
Carpenter shop.....	1,400.00	
Property room.....	4,500.00	
Office of Accounts.....	14,000.00	
Appointment Section.....	4,700.00	
File room.....	3,600.00	
Total.....	83,660.00	
General expenses, Bureau of Animal Industry, 1909, \$947,200.		
Salaries:		
In Washington.....	\$124,700.00	
Out of Washington.....	485,900.00	
Stationery.....	6,000.00	
Miscellaneous supplies and services, including fuel, freight, express, telegraph, telephone, lights, experimental animals, experimental dairy products, forage, lumber, livery service, laboratory apparatus, etc.....	74,700.00	
Furniture.....	10,000.00	
Rent.....	6,000.00	
Travel expense.....	239,900.00	
Total amount of above appropriation (an increase over 1908 of \$55,000).....	947,200.00	
Salaries, Bureau of Animal Industry, 1910, \$115,100—Continued.		
lump fund for general expenses).....	\$2,160.00	
3 skilled laborers, at \$600 each (increase of 1 by transfer from lump fund for general expenses).....	1,800.00	
1 skilled laborer.....	600.00	
NOTE.—One illustrator, at \$1,400, transferred to lump fund for general expenses.....		
4 laborers, at \$600 each (by transfer from lump fund for general expenses).....	2,400.00	
1 laborer (by transfer from lump fund for general expenses).....	480.00	
1 charwoman (by transfer from lump fund for general expenses).....	540.00	
6 charwomen, at \$480 each (by transfer from lump fund for general expenses).....	2,880.00	
2 charwomen, at \$240 each (by transfer from lump fund for general expenses).....	480.00	
Total amount estimated (an apparent increase over 1909 of \$31,440).....	115,100.00	
NOTE.—The apparent increase is \$31,440, but not considering the places transferred to and from the lump fund for general expenses there is an actual increase of \$3,000.		
Administration.....	17,800.00	
Inspection division.....	9,000.00	
Quarantine division.....	2,500.00	
Dairy division.....	11,500.00	
Animal husbandry.....	4,500.00	
Biochemic division.....	4,500.00	
Pathological division.....	8,500.00	
Zoological division.....	4,200.00	
Editorial office.....	6,500.00	
Library.....	2,800.00	
Carpenter shop.....	11,800.00	
Property room.....	6,200.00	
Office of Accounts.....	14,500.00	
Appointment Section.....	6,000.00	
File room.....	4,800.00	
Total.....	115,100.00	
General expenses, Bureau of Animal Industry, 1910, \$1,043,760.		
Salaries.....	\$646,000.00	
Stationery.....	6,000.00	
Miscellaneous supplies and services, including fuel, freight, express, telegraph, telephone, lights, experimental animals, experimental dairy products, forage, lumber, livery service, laboratory apparatus, etc.....	131,660.00	
Furniture.....	10,000.00	
Rent.....	6,000.00	
Travel expense.....	244,100.00	
Total amount estimated.....	1,043,760.00	
NOTE.—An apparent increase of \$96,560, but adding the net saving in places transferred to and from the statutory roll, amounting to \$28,440, the actual increase is \$125,000. Of this amount it is estimated that \$25,000 will be needed for proceeding with investigations relative to the wholesomeness of milk products and the relation of tuberculosis and other diseases of dairy cattle and insanitary conditions to the contamination of the milk supply; \$25,000 is asked for the purchase of additional land for the experiment station at Bethesda, Md. No land has been purchased for this station since the fiscal		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Animal Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses, Bureau of Animal Industry, 1908, \$892,200—Cont'd.</i>	<i>General expenses, Bureau of Animal Industry, 1909, \$947,200—Continued.</i>	<i>General expenses, Bureau of Animal Industry, 1910, \$1,043,760—Continued.</i>
<p>year 1903, although the work carried on there has increased so greatly that it has been necessary to rent 64 acres for the conduct of important investigations. The lessors can terminate the present lease by six months' notice, and thus compel the department to abandon these various investigations. It is deemed advisable to purchase the land at this time, so that the permanency of the bureau may be assured for such investigations as have been found necessary in its work. Fifteen thousand dollars is recommended for expenses in gathering evidence in cases to be submitted to the Department of Justice for prosecution under the "twenty-eight-hour law." The balance of the amount, namely, \$60,000, is to cover the demand for additional assistance and miscellaneous expenses created by the normal growth of the bureau, partly along the lines of dairying and animal husbandry branches of the bureau work, which are of more recent development and have not received as much attention as have the other divisions. Some minor changes and additions have also been made in the wording of the appropriation.</p>		
PROJECTS.		
(1) Eradication of scabies in sheep:	(1) Eradication of scabies in sheep:	(1) Eradication of scabies in sheep:
Salaries..... \$200,531.24	Salaries..... \$220,000.00	Salaries..... \$200,000.00
Travel expense..... 97,147.33	Travel expense..... 123,000.00	Travel expense..... 120,000.00
Miscellaneous expense..... 3,736.53	Miscellaneous expense..... 7,000.00	Miscellaneous expense..... 5,000.00
301,415.10	350,000.00	325,000.00
<p>This work has for its ultimate object the complete eradication from the United States of the contagious disease known as "scabies" or "scab" of sheep. The methods employed are quarantine, inspection, dipping of affected or exposed animals in disinfecting solutions for the destruction of the mites which cause the disease, disinfection of cars, stock yards, etc. The work was conducted in North Dakota, South Dakota, Kansas, Nebraska, Colorado, Montana, Wyoming, Utah, Oregon, California, Nevada, New Mexico, Arizona and Texas. The prevalence of the disease and the area in which it exists have been greatly reduced.</p>		
(2) Eradication of scabies in cattle:	(2) Eradication of scabies in cattle:	(2) Eradication of scabies in cattle:
Salaries..... 89,330.80	Salaries..... 66,000.00	Salaries..... 100,000.00
Travel expense..... 36,775.05	Travel expense..... 27,000.00	Travel expense..... 35,000.00
Miscellaneous expense..... 889.93	Miscellaneous expense..... 2,000.00	Miscellaneous expense..... 5,000.00
126,995.78	95,000.00	140,000.00
<p>This disease is similar to scabies of sheep, and the object of the work and the methods followed are the same. During the fiscal year the work was carried on in North Dakota, South Dakota, Kansas, Nebraska, Colorado, Montana, Wyoming, Oklahoma, Texas, and New Mexico.</p>		
(3) Inspection of southern cattle:	(3) Inspection of southern cattle:	(3) Inspection of southern cattle:
Salaries..... 32,572.99	Salaries..... 45,000.00	Salaries..... 35,000.00
Travel expense..... 7,729.45	Travel expense..... 15,000.00	Travel expense..... 10,000.00
Miscellaneous expense..... 429.19	Miscellaneous expense..... 5,000.00	Miscellaneous expense..... 5,000.00
40,731.63	65,000.00	50,000.00
<p>This work consists in the inspection of cattle in sections quarantined or provisionally quarantined on account of Texas or southern cattle fever, to determine whether they carry infection and under what conditions they are entitled to move out of these sections, and in following up work of tick eradication so as to hold ground gained, and prevent reinfection.</p>		
(4) Supervision of transportation of live stock and inspection of vessels:	(4) Supervision of transportation of live stock and inspection of vessels:	(4) Supervision of transportation of live stock and inspection of vessels:
Salaries..... 17,408.52	Salaries..... 34,300.00	Salaries..... 29,000.00
Travel expense..... 2,210.56	Travel expense..... 500.00	Travel expense..... 700.00
Miscellaneous expense..... 229.31	Miscellaneous expense..... 200.00	Miscellaneous expense..... 300.00
19,848.39	35,000.00	30,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Animal Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses, Bureau of Animal Industry, 1908, \$892,200—Cont'd.</i>	<i>General expenses, Bureau of Animal Industry, 1909, \$947,200—Continued.</i>	<i>General expenses, Bureau of Animal Industry, 1910, \$1,043,760—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(4) Supervision of transportation of live stock and inspection of vessels—Continued.		4) Supervision of transportation of live stock and inspection of vessels—Continued.
Animals are inspected at shipping and stock centers in order to prevent the spread of contagious diseases through interstate commerce. The shipment of live stock is also supervised with a view to the enforcement of the act of June 29, 1906, commonly known as the "twenty-eight-hour law." Vessels carrying export animals are inspected and required to conform to regulations as to fittings, feed, water, ventilation, attendants, etc.		Execution of the twenty-eight-hour law:
		Salaries..... \$8,000.00
		Travel expense..... 6,500.00
		Miscellaneous expense..... 500.00
		15,000.00
(5) Inspection and quarantine of imported animals:	(5) Inspection and quarantine of imported animals:	(5) Inspection and quarantine of imported animals:
Salaries..... \$26,685.06	Salaries..... \$23,000.00	Salaries..... 23,000.00
Travel expense..... 6,297.33	Travel expense..... 3,500.00	Travel expense..... 4,000.00
Miscellaneous expense..... 1,795.74	Miscellaneous expense..... 3,500.00	Miscellaneous expense..... 33,000.00
34,778.07	30,000.00	60,000.00
All animals offered for importation are carefully inspected and some are quarantined, to prevent the introduction of contagious diseases. Quarantine stations are maintained at several places.		
(6) Inspection work relative to existence of contagious diseases and tuberculin and mallein testing of animals:	(6) Inspection work relative to existence of contagious diseases and tuberculin and mallein testing of animals:	(6) Inspection work relative to existence of contagious diseases and tuberculin and mallein testing of animals:
Salaries..... 35,899.68	Salaries..... 10,000.00	Salaries..... 20,000.00
Travel expense..... 21,466.11	Travel expense..... 8,000.00	Travel expense..... 10,000.00
Miscellaneous expense..... 3,623.08	Miscellaneous expense..... 2,000.00	Miscellaneous expense..... 5,000.00
60,988.87	20,000.00	35,000.00
This covers miscellaneous field work, such as investigation of reported outbreaks of disease, inspections to determine whether certain contagious diseases exist, and testing of cattle for tuberculosis and horses for glanders.		
(7) Investigations and experiments in dairy industry:	(7) Investigations and experiments in dairy industry:	(7) Investigations and experiments in dairy industry:
Salaries..... 59,250.13	Salaries..... 63,000.00	Salaries..... 75,000.00
Travel expense..... 24,135.42	Travel expense..... 18,000.00	Travel expense..... 21,000.00
Miscellaneous expense..... 14,066.90	Miscellaneous expense..... 10,000.00	Miscellaneous expense..... 15,000.00
97,452.45	91,000.00	111,000.00
This work includes investigations in the manufacture, transportation, and storage of butter, the manufacture of American cheddar, Swiss, and other European varieties of cheese, and the problems incident to their storage and distribution; the problems involved in supplying cities with pure milk; investigation of milk secretion, including the effect of feed, water, breed, and individuality of the animal on the composition of the milk; investigations in the organization and management of dairy enterprises from an economic standpoint, including the collection of monthly reports from creameries and cheese factories to obtain information for the improvement of methods in common use.	Cooperative investigations of the dairy industry in the Southern States:	Cooperative investigations of the dairy industry in the Southern States:
	Salaries..... 17,000.00	Salaries..... 17,000.00
	Travel expense..... 10,000.00	Travel expense..... 10,000.00
	Miscellaneous expense..... 1,000.00	Miscellaneous expense..... 1,000.00
	28,000.00	28,000.00
(8) Inspection of renovated butter factories and markets:	(8) Inspection of renovated butter factories and markets:	(8) Inspection of renovated butter factories and markets:
Salaries..... 5,920.00	Salaries..... 8,500.00	Salaries..... 6,000.00
Travel expense..... 2,747.22	Travel expense..... 6,500.00	Travel expense..... 3,400.00
Miscellaneous expense..... 883.67	Miscellaneous expense..... 1,000.00	Miscellaneous expense..... 600.00
9,550.89	16,000.00	10,000.00
This inspection is maintained under act of Congress of May 9, 1902.		
(9) Investigations and experiments in animal husbandry:	(9) Investigations and experiments in animal husbandry:	(9) Investigations and experiments in animal husbandry:
Salaries..... 12,833.99	Salaries..... 20,000.00	Salaries..... 28,000.00
Travel expense..... 3,862.14	Travel expense..... 13,000.00	Travel expense..... 18,000.00
Miscellaneous expense..... 7,145.21	Miscellaneous expense..... 2,000.00	Miscellaneous expense..... 4,000.00
23,841.34	35,000.00	50,000.00
This work includes supervision of pedigree record associations under paragraph 473 of the tariff act of July 24, 1897, as amended March 3, 1903; experiments in feeding cotton-seed products to hogs to determine the effects of such products and to devise a safe method of feeding them; experiments in breeding and feeding poultry; efforts to devise a uniform classification for American carriage horses for use at fairs and to encourage the breeding of such horses, and experiments in breeding small animals to elucidate problems of heredity with regard to inbreeding, crossbreeding, selection, telegony, etc.		
(10) Scientific investigations of diseases in animals:	(10) Scientific investigations in diseases of animals:	(10) Scientific investigations in diseases of animals:
Salaries..... 60,280.74	Salaries..... 71,800.00	Salaries..... 80,000.00
Travel expense..... 1,965.21	Travel expense..... 2,200.00	Travel expense..... 4,000.00
Miscellaneous expense..... 42,118.03	Miscellaneous expense..... 39,000.00	Miscellaneous expense..... 50,000.00
104,363.98	113,000.00	134,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Animal Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses, Bureau of Animal Industry, 1908, \$392,200—Cont'd.</i>	<i>General expenses, Bureau of Animal Industry, 1909, \$947,200—Continued.</i>	<i>General expenses, Bureau of Animal Industry, 1910, \$1,043,760—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(10) Scientific investigations of diseases in animals—Continued. Some of the diseases investigated are hog cholera, tuberculosis, glanders, rabies, mycotic stomatitis, quail diseases, Malta fever in imported goats, surra in imported cattle, fowl cholera, and parasitic diseases of sheep and other animals.		
(11) General administrative work:	(11) General administrative work:	(11) General administrative work:
Salaries.....\$30,245.67	Salaries.....\$32,000.00	Salaries.....\$25,000.00
Travel expense.....2,129.51	Travel expense.....13,200.00	Travel expense.....1,500.00
Miscellaneous expense.....23,743.30	Miscellaneous expense.....24,000.00	Miscellaneous expense.....29,260.00
<u>56,118.48</u>	<u>69,200.00</u>	<u>55,760.00</u>
This covers the general administration and supervision of the bureau's work and includes all expenditures not otherwise chargeable.		
<i>General expenses, Bureau of Animal Industry, 1908 (diseases of domestic animals in Minnesota), \$5,000.</i>		
Salaries outside of Washington.....\$1,805.00		
Stationery.....10.65		
Miscellaneous supplies and services, equipment, books, machinery, etc.....668.20		
Furniture.....24.83		
Apparatus, instruments, and laboratory material.....417.40		
Travel and station and field expenses.....43.93		
Total expenditures to September 30, 1908.....2,970.01		
Outstanding liabilities (estimated), September 30, 1908...196.40		
Balance to be turned back to Treasury (estimated).....1,833.59		
<u>Total amount of above appropriation.....5,000.00</u>		
PROJECT.		
(1) Cooperative experiments and investigations in diseases of domestic animals in the State of Minnesota:		
Salaries.....1,800.00		
Travel expense.....28.00		
Miscellaneous expense.....1,142.01		
<u>2,970.01</u>		
This work was conducted in cooperation with the Minnesota Experiment Station.		
<i>General expenses, Bureau of Animal Industry, 1908 (animal breeding and feeding), \$50,000.</i>	<i>General expenses, Bureau of Animal Industry, 1909 (animal breeding and feeding), \$50,000.</i>	<i>General expenses, Bureau of Animal Industry, 1910 (animal breeding and feeding), \$50,000.</i>
Salaries outside of Washington.....\$17,621.23	Salaries outside of Washington...\$14,100.00	Salaries outside of Washington...\$14,100.00
Miscellaneous supplies and services, equipment, books, machinery, etc.....27,548.82	Travel expense.....2,300.00	Travel expense.....2,300.00
Furniture.....210.92	Miscellaneous expense.....33,600.00	Miscellaneous expense.....33,600.00
Fuel.....208.73		
Freight.....708.46		
Express.....102.90		
Telegraph......53		
Telephone.....58.01		
Gas and electricity.....55.48		
Apparatus, instruments, and laboratory material.....41.12		
Travel and station and field expenses.....2,254.42		
Total expenditure to September 30, 1908.....48,810.62		
Outstanding liability September 30, 1908 (estimated).....1,120.89		
Balance to be turned back to Treasury (estimated).....68.49		
<u>Total amount of above appropriation.....50,000.00</u>	<u>Total amount of above appropriation.....50,000.00</u>	<u>Total amount estimated.....50,000.00</u>
PROJECTS.	PROJECTS.	PROJECTS.
(1) Cooperative experiments in animal breeding and feeding:	(1) Cooperative experiments in animal breeding and feeding:	(1) Cooperative experiments in animal breeding and feeding:
Salaries.....17,621.23	Salaries.....14,100.00	Salaries.....14,100.00
Traveling expense.....2,254.42	Travel expense.....2,300.00	Travel expense.....2,300.00
Miscellaneous expense.....28,934.97	Miscellaneous expense.....33,600.00	Miscellaneous expense.....33,600.00
<u>48,810.62</u>	<u>50,000.00</u>	<u>50,000.00</u>
This work is conducted in cooperation with state experiment stations under a special appropriation of \$50,000. It consists of horse breeding in Colorado and Vermont, sheep breeding in Wyoming, breeding milking Shorthorn cattle in Minnesota, poultry breeding and feeding in Maine, animal nutrition investigations in Pennsylvania, and breeding and feeding cattle for beef in Alabama.	This work is conducted in cooperation with state experiment stations under a special appropriation of \$50,000, which includes the following: In Alabama: Southern beef production. In Colorado: Breeding the American carriage horse. In Iowa: Breeding gray draft horse. In Maine: Poultry breeding. In Minnesota: Breeding milking Shorthorns. In North Dakota: Producing strain of Holstein dairy cattle adapted to North Dakota.	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Animal Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses, Bureau of Animal Industry, 1908 (animal breeding and feeding), \$50,000—Continued.</i>	<i>General expenses, Bureau of Animal Industry, 1909, (animal breeding and feeding) \$50,000—Continued.</i>	<i>General expenses, Bureau of Animal Industry, 1910 (animal breeding and feeding), \$50,000—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
	(1) Cooperative experiments, etc.—Continued. In Pennsylvania: Animal nutrition investigation. In Vermont: Morgan horse breeding. In Wyoming: Sheep breeding to develop breed suited to range conditions.	
<i>Meat inspection, Bureau of Animal Industry, 1908, \$3,000,000.</i>	<i>Meat inspection, Bureau of Animal Industry, 1909, \$3,000,000.</i>	<i>Meat inspection, Bureau of Animal Industry, 1910, \$3,000,000.</i>
Salaries:	Salaries:	Salaries:
In Washington.....	In Washington.....	In Washington.....
Outside of Washington.....	Outside of Washington.....	Outside of Washington.....
Stationery.....	Stationery.....	Stationery.....
Miscellaneous supplies and services, equipment, books, machinery, etc.....	Miscellaneous supplies and services, including freight, express, telegraph, telephone, gas and electricity, livery, laboratory apparatus, etc.....	Miscellaneous supplies and services, including freight, express, telegraph, telephone, gas and electricity, livery, laboratory apparatus, etc.....
Furniture.....	Furniture.....	Furniture.....
Freight.....	Rent.....	Rent.....
Express.....	Meat-inspection stamps, certificates, tags, hog-rings, seals, disks, sealing presses, brands..	Meat-inspection stamps, certificates, tags, hog-rings, seals, disks, sealing presses, brands..
Telegraph.....	Travel expenses.....	Travel expenses.....
Telephone.....		
Rent.....		
Gas and electricity.....		
Apparatus, instruments, and laboratory material.....		
Travel and station and field expenses.....		
Total expenditures to September 30, 1908.....	Total amount of above appropriation.....	Total amount of above appropriation.....
Less repayments to credit of appropriation.....		
Net expenditures to September 30, 1908.....		
Outstanding liability September 30, 1908 (estimated).....		
Balance to be turned back to Treasury (estimated).....		
Total amount of above appropriation.....		
PROJECT.	PROJECT.	PROJECT.
Meat inspection:	Meat inspection:	Meat inspection:
Salaries.....	Salaries.....	Salaries.....
Travel expense.....	Travel expense.....	Travel expense.....
Miscellaneous expense.....	Miscellaneous expense.....	Miscellaneous expense.....
The meat inspection service covers the inspection of animals before and at the time of slaughter, the condemnation of diseased carcasses, the supervision of the preparation and shipment of meats and meat products, the stamping of packages, the issuance of certificates of inspection, and the inspection of live animals exported for slaughter abroad.		
<i>Eradicating cattle ticks, Bureau of Animal Industry, 1907-8, \$10,811.90; eradicating cattle ticks, Bureau of Animal Industry, 1908, \$125,000—\$135,811.90.</i>	<i>Eradicating cattle ticks, Bureau of Animal Industry, 1909, \$250,000 (\$25,000 available 1908-9).</i>	<i>Eradicating cattle ticks, Bureau of Animal Industry, 1910, \$300,000.</i>
Salaries outside of Washington.....	Salaries.....	Salaries.....
Miscellaneous supplies and services, equipment, books, machinery, etc.....	Travel expense.....	Travel expense.....
Freight.....	Miscellaneous expense.....	Miscellaneous expense.....
Telegraph.....		
Telephone.....		
Rent.....		
Travel and station and field expenses.....	Total amount of above appropriation.....	Total amount estimated..
Total expenditures to September 30, 1908.....		
Less repayments to credit of appropriation.....		
Net expenditures to September 30, 1908.....		
Outstanding liability to September 30, 1908 (estimated).....		
Balance to be turned back to Treasury (estimated).....		
Total amount of above appropriation.....		

NOTE.—An increase of \$50,000 is submitted. This work is carried on in cooperation with state authorities, and during the past year the ticks have been eradicated from a considerable territory. As the States concerned appreciate the importance of the work and are appropriating additional funds for its prosecution, it is necessary that the federal appropriations be enlarged to cooperate properly with the state authorities. An increase of \$50,000 will enable the department to meet the increased cooperation offered by the States during the coming year. Several minor changes have also been made in the wording of the appropriation. This appropriation was formerly carried as an "Emergency appropriation" at the end of the bill, but its inclusion in this bureau, to which it pertains, is suggested for the purpose of simplifying the bookkeeping, as the work should be continued for several years.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Animal Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Eradicating cattle ticks, Bureau of Animal Industry, 1907-8, \$10,811.90; eradicating cattle ticks, Bureau of Animal Industry, 1908, \$123,000—\$135,811.90—Continued.</i>	<i>Eradicating cattle ticks, Bureau of Animal Industry, 1909, \$250,000 (\$25,000 available 1908-9)—Continued.</i>	<i>Eradicating cattle ticks, Bureau of Animal Industry, 1910, \$300,000—Continued.</i>
PROJECT.	PROJECT.	PROJECT.
Eradication of southern cattle ticks:	Eradication of southern cattle ticks:	Eradication of southern cattle ticks:
Salaries..... \$100,017.73	Salaries..... \$184,000.00	Salaries..... \$225,000.00
Travel expense..... 32,333.28	Travel expense..... 48,000.00	Travel expense..... 60,000.00
Miscellaneous expense..... 717.51	Miscellaneous expense..... 18,000.00	Miscellaneous expense..... 15,000.00
133,068.52	250,000.00	300,000.00
This work has been carried on in cooperation with state authorities in Virginia North Carolina, South Carolina, Georgia, Alabama, Tennessee, Kentucky, Missouri, Arkansas, Oklahoma, Louisiana, Texas, and California, under special appropriations, and consists in the extermination of the ticks which transmit the infection of Texas or southern cattle fever. The results so far indicate that the ultimate complete extermination of this costly pest is entirely practicable.	In addition to the States enumerated in column 1, this work is also being carried on in the State of Mississippi.	
Total of all appropriations for Bureau of Animal Industry..... 4,168,291.90	Total of all appropriations for Bureau of Animal Industry (an increase over 1908 of \$162,558.10)..... 4,330,860.00	Total amount estimated for Bureau of Animal Industry (an increase over 1909 of \$178,000.00).... 4,508,860.00
Total net expenditures to September 30, 1908..... 3,861,303.16		
Outstanding liabilities on September 30, 1908 (estimated)..... 30,192.48		
Balance to be turned back in Treasury (estimated)..... 276,796.26		

BUREAU OF PLANT INDUSTRY.

<i>Salaries, Bureau of Plant Industry, 1908, \$183,450.</i>	<i>Salaries, Bureau of Plant Industry, 1909, \$187,410.</i>	<i>Salaries, Bureau of Plant Industry, 1910, \$189,950.</i>
Galloway, B. T..... Chief of Bureau, at \$5,000..... \$5,000.00	1 plant physiologist and pathologist, who shall be chief of bureau..... \$5,000.00	1 plant physiologist and pathologist, who shall be chief of bureau..... \$5,000.00
Jones, James E..... Chief clerk, at \$2,250..... 2,250.00	1 chief clerk..... 2,250.00	1 chief clerk..... 2,250.00
Rockwell, J. E..... Editor, at \$2,000..... 2,000.00	1 editor..... 2,000.00	NOTE.—One editor, at \$2,000, and 1 superintendent of gardens and grounds, at \$1,800, transferred to lump fund for general expenses.
Estabrook, Leon M..... Officer in charge of records..... 2,000.00	1 officer in charge of records..... 2,000.00	1 officer in charge of records..... 2,000.00
Byrnes, E. M..... Superintendent gardens and grounds, at \$1,800..... 1,800.00	1 superintendent of gardens and grounds..... 1,800.00	3 executive clerks, at \$1,980 each (one by transfer from lump fund for seeds, making increase of two submitted)..... 5,940.00
Fealy, Nellie E..... Clerk, class four..... 1,800.00	4 clerks, class four..... 7,200.00	4 clerks, class four..... 7,200.00
Henkel, Alice..... Clerk, class four..... 1,725.00	8 clerks, class three..... 12,800.00	8 clerks, class three..... 12,800.00
Jones, O. F..... Clerk, class four..... 1,610.00	13 clerks, class two..... 18,200.00	21 clerks, class one..... 34,800.00
Taylor, W. E..... Clerk, class four..... 150.00	1 seed clerk and superintendent..... 1,200.00	1 seed clerk and superintendent..... 1,200.00
Long, W. W..... Clerk, class four..... 1,800.00	1 clerk or artist..... 1,200.00	4 clerks, class four..... 840.00
Benner, H. A..... Clerk, class three..... 1,533.34	1 clerk or artist..... 1,200.00	8 clerks, class three..... 12,800.00
Henkel, Alice..... Clerk, class three..... 66.67	1 clerk..... 1,080.00	1 clerk (by transfer from lump fund for general expenses)..... 1,500.00
Bradley, E. H..... Clerk, class three..... 1,466.66	16 clerks, at \$1,000 each..... 16,000.00	13 clerks, class two..... 18,200.00
Callander, W. F..... Clerk, class three..... 133.34	6 clerks, at \$900 each..... 5,400.00	31 clerks, class one (increase of 2 submitted, 1 in lieu of 1 clerk or artist, at \$1,200, dropped, and 1 by transfer from lump fund for seeds)..... 37,200.00
Gochenour, W. P..... Clerk, class three..... 1,600.00	12 clerks, at \$840 each..... 10,080.00	1 seed clerk and superintendent..... 1,200.00
Huddleson, S. M..... Clerk, class three..... 1,600.00	1 clerk..... 800.00	NOTE.—One clerk or artist, at \$1,200, dropped (included in clerks of class one), and 1 clerk or artist, at \$840, dropped (included in clerks at \$840).
Irwin, W. N..... Clerk, class three..... 1,600.00	12 clerks, at \$720 each..... 8,640.00	1 clerk..... 1,080.00
Marcy, W. L..... Clerk, class three..... 133.34	4 clerks, at \$660 each..... 2,640.00	19 clerks, at \$1,000 each (increase of 3 by transfer from lump fund for general expenses)..... 19,000.00
Taylor, W. E..... Clerk, class three..... 1,466.66	4 clerks, at \$600 each..... 2,400.00	16 clerks, at \$900 each (increase of 10 submitted, 2 in lieu of 1 photographer or clerk, at \$900, and 1 illustrator or clerk, at \$900, dropped, and 8 by transfer from the lump fund for general expenses)..... 14,400.00
Saunders, B. C..... Clerk, class three..... 1,600.00	1 photographer or clerk..... 900.00	16 clerks, at \$840 each (increase of 4 submitted, 3 in lieu of 1 clerk or artist, at \$840, and 2 clerks or messengers, at \$840 each, dropped, and 1 by transfer from lump fund for general expenses)..... 13,440.00
Wight, J. C..... Clerk, class three..... 1,600.00	1 assistant photographer..... 600.00	1 clerk..... 800.00
Albee, R. S..... Clerk, class two..... 1,400.00	1 illustrator or clerk..... 900.00	13 clerks, at \$720 each (increase of 1 by transfer from lump fund for general expenses)..... 9,360.00
Ball, W. A..... Clerk, class two..... 1,400.00	1 carpenter..... 900.00	8 clerks, messengers, or laborers, at \$660 each (in lieu of 4 clerks, at \$660 each, 3 skilled laborers, at \$660 each, and 1 messenger, at \$660, dropped)..... 5,280.00
Benner, H. A..... Clerk, class two..... 58.33	1 carpenter..... 840.00	16 clerks, messengers, or laborers, at \$600 each (in lieu of 4 clerks, 8 skilled laborers, and 3 messengers, at \$600 each, dropped, and 1 by transfer from lump fund for seeds)..... 9,600.00
Reed, C. W..... Clerk, class two..... 1,263.89	2 gardeners or assistants, at \$1,000 each..... 2,000.00	
Callander, W. F..... Clerk, class two..... 1,263.33	6 gardeners, at \$900 each..... 5,400.00	
Garton, A. C..... Clerk, class two..... 116.67	2 gardeners, at \$840 each..... 1,680.00	
Cox, W. P..... Clerk, class two..... 1,400.00	4 gardeners, at \$780 each..... 3,120.00	
Ferrall, John A..... Clerk, class two..... 1,400.00	5 gardeners, at \$720 each..... 3,600.00	
Kinney, Anna H. B..... Clerk, class two..... 1,384.44	3 gardeners, at \$660 each..... 1,980.00	
McClure, Mary M..... Clerk, class two..... 1,400.00	1 gardener..... 600.00	
Marcy, W. L..... Clerk, class two..... 1,283.33	1 skilled laborer..... 900.00	
Oberly, Eunice R..... Clerk, class two..... 116.67	1 painter..... 840.00	
Meloy, F. E..... Clerk, class two..... 1,400.00	2 plumbers, at \$840 each..... 1,680.00	
Meloy, Guy S..... Clerk, class two..... 1,400.00	2 clerks or messengers, at \$840 each..... 1,680.00	
Murphy, Jessie A..... Clerk, class two..... 1,077.23	9 skilled laborers, at \$720 each..... 6,480.00	
Passmore, D. G..... Clerk, class two..... 1,400.00	3 skilled laborers, at \$660 each..... 1,980.00	
Allen, Jessie M..... Clerk, class one..... 1,200.00	8 skilled laborers, at \$600 each..... 4,800.00	
Bailey, R. V..... Clerk, class one..... 1,150.00	3 skilled laborers, at \$540 each..... 1,620.00	
Ware, B. G..... Clerk, class one..... 40.00	1 messenger..... 660.00	
Bell, Grace..... Clerk, class one..... 1,200.00	3 messengers, at \$600 each..... 1,800.00	
Caruthers, R. P..... Clerk, class one..... 1,200.00	10 skilled laborers or messengers, at \$180 each..... 4,800.00	
Church, Lillian..... Clerk, class one..... 1,160.00	2 messenger boys, at \$360 each..... 720.00	
Coit, Jennie L..... Clerk, class one..... 83.33	2 messenger boys, at \$300 each..... 600.00	
Oberly, Eunice R..... Clerk, class one..... 1,100.00		
Collier, Wm..... Clerk, class one..... 1,200.00		
Cuppernell, Bert..... Clerk, class one..... 6.67		
Taylor, Thos. C..... Clerk, class one..... 1,186.67		
Davenport, L. H..... Clerk, class one..... 1,200.00		
Dodge, Allen..... Clerk, class one..... 820.00		
Hugins, F. A..... Clerk, class one..... 300.00		
Goding, Harry..... Clerk, class one..... 1,200.00		
Gorman, M. J..... Clerk, class one..... 1,200.00		
Graham, J. P..... Clerk, class one..... 1,200.00		
Grant, Charles V..... Clerk, class one..... 1,200.00		
Herrick, Emma C..... Clerk, class one..... 1,200.00		
Hicks, E. E..... Clerk, class one..... 1,200.00		
Knight, E. Q..... Clerk, class one..... 1,200.00		
Lane, R. W..... Clerk, class one..... 1,200.00		
McDonnell, E. E..... Clerk, class one..... 1,200.00		
Moise, Frederic S..... Clerk, class one..... 1,200.00		
Newton, A. A..... Clerk, class one..... 1,200.00		
	Total of above appropriation (a decrease from 1908 of \$2,040)..... 187,410.00	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.		Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Bureau of Plant Industry, 1908, \$189,450—Continued.</i>		<i>Salaries, Bureau of Plant Industry, 1909, \$187,410—Continued.</i>	<i>Salaries, Bureau of Plant Industry, 1910, \$189,950—Continued.</i>
Parker, S. M.	Clerk, class one	\$1,200.00	
Price, Nellie V.	Clerk, class one	1,200.00	
Schutt, Ellen I.	Clerk, class one	1,200.00	
Shepherd, A. C.	Clerk, class one	1,193.33	
Smith, L. J.	Clerk, class one	1,200.00	
Warner, M. F.	Clerk, class one	1,193.33	
Williams, A. H.	Clerk, class one	1,058.33	
Woolverton, Pearl	Clerk, class one	1,200.00	
Garton, A. C.	Seed clerk and superintendent	1,100.00	
Stein, Lewis E.	at \$1,200	100.00	
Austin, Ella M.	Artist, at \$1,200	400.00	
Brewer, J. F.		546.67	
Chase, Agnes		51.33	
Mason, Charles S.	Artist, at \$340	70.00	
Schneider, Mary M.		630.00	
Bailey, R. V.		33.00	
Gibson, J. A.		108.00	
Gordon, Edith F.	Clerk, at \$1,080	90.00	
Hugins, F. A.		765.00	
Taylor, Thomas C.		12.00	
Allan, Isabelle		250.00	
Stein, Lewis E.	Clerk, at \$1,000	666.66	
Allen, Clyde W.	Clerk, at \$1,000	1,000.00	
Ashmore, C. D.	Clerk, at \$1,000	1,000.00	
Atwood, Alice C.	Clerk, at \$1,000	930.57	
Milton, Katherine		52.78	
Austin, Ella M.	Clerk, at \$1,000	655.55	
Klock, Rachel M.		333.34	
Bagley, M. H.	Clerk, at \$1,000	1,000.00	
Bailey, R. V.	Clerk, at \$1,000	11.11	
Hudson, Agnes T.		988.89	
Coit, Jennie L.	Clerk, at \$1,000	908.32	
Escavaille, C. L.		83.34	
Draper, Annie E.	Clerk, at \$1,000	291.67	
Sweet, M. L.		708.34	
Estler, H. S.	Clerk, at \$1,000	250.00	
Gibson, W. A.		750.00	
Gary, Kate F.	Clerk, at \$1,000	1,000.00	
Gordon, Edith F.		875.00	
Hugins, F. A.	Clerk, at \$1,000	41.67	
MacMorris, Laura		83.34	
Johnston, Gertrude M.	Clerk, at \$1,000	1,000.00	
McQuinn, H. L.	Clerk, at \$1,000	1,000.00	
Phelps, Nora H.	Clerk, at \$1,000	1,000.00	
Sawyer, Alice M.	Clerk, at \$1,000	1,000.00	
Baxter, Mary A.	Clerk, at \$900	75.00	
Escavaille, C. L.		825.00	
Burke, Edmund	Clerk, at \$900	900.00	
Corrick, H. K.	Clerk, at \$900	637.50	
Sweet, M. L.		262.50	
Estler, H. S.	Clerk, at \$900	675.00	
Zell, Carrie		225.00	
Gordon, Edith F.		27.50	
Howell, Edna D.	Clerk, at \$900	300.00	
Hudson, Agnes T.		10.00	
Kolck, Rachel M.		562.50	
MacMorris, Laura		450.00	
Miller, D. Cecil	Clerk, at \$900	372.50	
Schneider, Mary M.		75.00	
Ammen, Mathilde	Clerk, at \$840	525.00	
Fitzpatrick, Beulah		178.49	
Austin, Mary A.	Clerk, at \$840	805.00	
Kolck, Rachel M.		35.00	
Baxter, Mary A.	Clerk, at \$840	770.00	
Tyler, Clara H.		70.00	
Bell, B. C.	Clerk, at \$840	840.00	
Connor, Bernard		210.00	
Zell, Carrie	Clerk, at \$840	630.00	
Curtin, Grace M.		280.00	
Howell, Edna D.	Clerk, at \$840	560.00	
Davis, James H.	Clerk, at \$840	234.33	
Holland, J. D.		585.67	
Gordon, Edith F.	Clerk, at \$840	9.33	
Lewis, Ella		830.67	
Graham, Grace	Clerk, at \$840	840.00	
MacMorris, Laura	Clerk, at \$840	350.00	
Palmer, William L.		471.33	
Martin, Alice R.	Clerk, at \$840	840.00	
Stothart, T. B.	Clerk, at \$840	840.00	
Tyler, Clara H.	Clerk, at \$800	733.33	
Alexander, Emma C.		180.00	
Armstrong, Jessie V.		106.00	
Crowley, Blanche L.	Clerk, at \$720	56.00	
Green, Lawrence H.		328.00	
Armstrong, H. C.	Clerk, at \$720	720.00	
Austin, Mary A.		30.00	
Ballard, Clara E.	Clerk, at \$720	300.00	
Wyatt, Hardee		235.00	
Bragdon, C. K.	Clerk, at \$720	720.00	
Connor, Bernard		540.00	
Smith, Lucy	Clerk, at \$720	180.00	
			NOTE.—Four clerks, at \$660 each, dropped (included in clerks, messengers, or laborers, at \$660); 4 clerks, at \$600 each, dropped (included in clerks, messengers, or laborers, at \$600); 1 photographer or clerk, at \$900, dropped (included in clerks, at \$900); 1 illustrator or clerk, at \$900, dropped (included in clerks, at \$900); and 1 assistant photographer, at \$600, transferred to lump fund for general expenses.
			1 carpenter..... \$900.00
			1 carpenter..... 840.00
			NOTE.—The following places are transferred to the lump fund for general expenses:
			2 gardeners or assistants, at \$1,000 each..... \$2,000
			6 gardeners, at \$900 each..... 5,400
			2 gardeners, at \$340 each..... 1,680
			4 gardeners, at \$780 each..... 3,120
			5 gardeners, at \$720 each..... 3,600
			3 gardeners, at \$600 each..... 1,980
			1 gardener..... 600
			1 skilled laborer..... 900.00
			1 skilled laborer (by transfer from the lump fund for general expenses)..... 840.00
			1 painter..... 840.00
			2 plumbers, at \$840 each..... 1,680.00
			NOTE.—Two clerks or messengers, at \$840, dropped (included in clerks at \$840).
			9 skilled laborers, at \$720 each..... 6,480.00
			NOTE.—Threeskilled laborers, at \$660 each, dropped (included in clerks, messengers, or laborers, at \$660); also 8 skilled laborers, at \$600 each (included in clerks, messengers, or laborers, at \$600).
			4 skilled laborers, at \$540 each (increase of 1 by transfer from lump fund for seeds)..... 2,160.00
			NOTE.—One messenger, at \$660, dropped (included in clerks, messengers, or laborers, at \$660); also 3 messengers, at \$600 each (included in clerks, messengers, or laborers, at \$600); and 10 skilled laborers or messengers, at \$480 each (included in skilled laborers, messengers, or messenger boys, at \$480).
			14 skilled laborers, messengers, or messenger boys, at \$480 each (10 in lieu of 10 skilled laborers or messengers, at \$480 each, dropped and 4 by transfer from lump fund for general expenses)..... 6,720.00
			4 messenger boys, at \$360 each (increase of 2 by transfer from lump fund for general expenses)..... 1,440.00
			3 messenger boys, at \$300 each (increase of 1 by transfer from lump fund for general expenses)..... 900.00
			Total amount estimated (an apparent increase over 1909 of \$2,540)..... 189,950.00
			NOTE.—The apparent increase is \$2,540, but not considering the places transferred to and from the lump funds, there is an actual increase of \$3,960.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.		Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Bureau of Plant Industry, 1908, \$189,450—Continued.</i>		<i>Salaries, Bureau of Plant Industry, 1909, \$187,410—Continued.</i>	<i>Salaries, Bureau of Plant Industry, 1910, \$189,950—Continued.</i>
Curtin, Grace M.....	Clerk, at \$720.....	\$480.00	
Sliter, E. L.....		240.00	
Dewdney, Marie V.....	Clerk, at \$720.....	210.00	
Millatt, Eugene.....		350.00	
Howell, H. H.....	Clerk, at \$720.....	630.00	
Nance, Nell W.....		90.00	
Hurdle, Ivy V.....	Clerk, at \$720.....	720.00	
McQueen, Lillian.....		60.00	
Mason, Charles S.....	Clerk, at \$720.....	660.00	
Palmer, Jessamine L.....		438.00	
Wischhoff, A. E.....	Clerk, at \$720.....	270.00	
Parker, Grace D.....	Clerk, at \$720.....	684.00	
Downes, M. A.....		165.00	
Grogan, Elizabeth H.....		20.17	
Lambert, May A.....	Clerk, at \$660.....	75.17	
Smith, Lucy.....		55.00	
Sliter, E. L.....		305.25	
Harvey, Rose A.....	Clerk, at \$660.....	616.00	
Muhleman, B. M.....	Clerk, at \$660.....	660.00	
Ourand, Myra E.....	Clerk, at \$660.....	163.16	
Veihmeyer, Frank J.....		304.33	
Barber, E. E.....	Clerk, at \$600.....	600.00	
Coleman, E. H.....		500.00	
Wyatt, Hardee.....	Clerk, at \$600.....	40.00	
Downes, M. A.....		225.00	
Dulin, Mary S.....	Clerk, at \$600.....	211.67	
Waters, Sarah.....		150.00	
Peacock, Eva M.....		175.00	
Reid, W. A.....	Clerk, at \$600.....	125.00	
Smith, Lucy.....		168.33	
Brodie, C. E.....	Clerk or messenger, at \$480....	480.00	
Ruark, A. A.....	Photographer or clerk, at \$900....	900.00	
Lower, Elsie E.....	Assistant photographer, at \$600....	600.00	
Dowdney, Marie V.....		637.50	
Edmonston, Bessie L.....	Illustrator or clerk, at \$900.....	242.50	
Walter, R. B.....	Carpenter, at \$900.....	900.00	
Smith, William A.....	Carpenter, at \$840.....	840.00	
Bissett, David.....	Gardener, at \$1,000.....	1,000.00	
Gauges, J. A.....	Gardener, at \$1,000.....	1,000.00	
Bullen, Henry.....	Gardener, at \$900.....	900.00	
Dawson, John P.....		825.00	
Mann, Angus C.....	Gardener, at \$900.....	75.00	
Juenemann, H. E.....		825.00	
Klapfer, Henry.....	Gardener, at \$900.....	75.00	
Keller, Charles.....	Gardener, at \$900.....	900.00	
Kerr, J. K., sr.....	Gardener, at \$900.....	900.00	
Quinn, James.....	Gardener, at \$900.....	900.00	
Byrnes, J. Wise.....	Gardener, at \$840.....	840.00	
Ecton, Thomas G.....	Gardener, at \$840.....	840.00	
Boyle, Henry H.....	Gardener, at \$780.....	223.17	
Olden, John W.....		556.83	
Haase, Henry F.....	Gardener, at \$780.....	450.67	
Haws, W. A.....		324.45	
Hauser, Ernest.....	Gardener, at \$780.....	780.00	
Jolliff, Jesse O.....	Gardener, at \$780.....	780.00	
Hofman, K.....		185.00	
Paget, Wilmer J.....	Gardener, at \$600.....	383.33	
Fraile, M.....	Gardener, at \$720.....	720.00	
Zoellner, H. G.....	Gardener, at \$720.....	720.00	
Evans, W. D.....	Gardener, at \$660.....	660.00	
Graner, Mike.....	Gardener, at \$660.....	660.00	
Lucas, W. R.....		165.00	
Simmonds, Edward.....	Gardener, at \$660.....	495.00	
Maxwell, G. R.....	Skilled laborer, at \$900.....	900.00	
Orton, W. S., sr.....	Painter, at \$840.....	840.00	
Kerr, James K., jr.....	Plumber, at \$840.....	840.00	
Schubert, Charles J.....	Plumber, at \$840.....	840.00	
Haws, Henry.....	Fireman, at \$720.....	714.00	
Kletsch, Ernest.....	Fireman, at \$720.....	720.00	
Ross, W. H.....	Fireman, at \$720.....	698.00	
Corrick, H. K.....		245.00	
Goss, Audrey.....	Clerk, at \$840.....	490.00	
Weaver, Elizabeth I.....		105.00	
Hall, C. L.....	Clerk, at \$840.....	840.00	
Bryant, R. A.....	Skilled laborer, at \$720.....	720.00	
Chandler, H. F.....		30.00	
Crandall, E. L.....	Skilled laborer, at \$720.....	480.00	
Nelson, Marvin C.....		144.00	
Duffy, Sadie.....	Skilled laborer, at \$720.....	720.00	
Hammerly, J. M.....	Skilled laborer, at \$720.....	720.00	
Kelly, J. W.....	Skilled laborer, at \$720.....	720.00	
Schultheis, W. H.....	Skilled laborer, at \$720.....	720.00	
Smith, Mary J.....	Skilled laborer, at \$720.....	718.00	
Willis, W. E.....	Skilled laborer, at \$720.....	720.00	
Cookman, G. E.....	Skilled laborer, at \$660.....	660.00	
Cutshall, G. W.....	Skilled laborer, at \$660.....	660.00	
Minor, G. O.....	Skilled laborer, at \$660.....	660.00	
Davis, Edw. F., jr.....	Skilled laborer, at \$600.....	180.00	
Ellis, Clara.....		50.00	
Hammersley, J. J.....	Skilled laborer, at \$600.....	92.00	
Hardenstein, F. P.....		211.67	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1232); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Bureau of Plant Industry, 1908, \$189,450—Continued.</i>	<i>Salaries, Bureau of Plant Industry, 1909, \$187,410—Continued.</i>	<i>Salaries, Bureau of Plant Industry, 1910, \$189,950—Continued.</i>
Franklin, C. D..... Skilled laborer, at \$600..... \$600.00		
Frazier, C. T..... Skilled laborer, at \$600..... 572.50		
Lee, Frank..... Skilled laborer, at \$600..... 600.00		
Page, J. E..... Skilled laborer, at \$600..... 600.00		
Porter, E. M..... Skilled laborer, at \$600..... 600.00		
Lynn, T. H..... } Skilled laborer, at \$600..... { 100.00		
Jones, Rosier B..... } 243.33		
McNaught, Archibald..... } 181.67		
Allen, Tibbett..... Skilled laborer, at \$540..... 540.00		
Clinkett, Isaac..... Skilled laborer, at \$540..... 540.00		
Gordon, J. C..... Skilled laborer, at \$540..... 524.25		
Hungerford, H. F..... } 49.50		
Prentiss, A. M..... Messenger, at \$660..... 533.50		
Rand, Clara C..... } 55.00		
Chandler, H. F..... Messenger, at \$600..... 575.00		
Winkler, J. H..... } 25.00		
Pierce, J. F..... Messenger, at \$600..... 553.33		
Prentiss, A. M..... } 46.67		
Taylor, James A..... Messenger, at \$600..... 550.00		
Hodges, A. J..... Watchman, at \$720..... 720.00		
Kelly, M. C..... Watchman, at \$720..... 720.00		
Scanlon, P..... Watchman, at \$720..... 720.00		
Disney, R. H..... Watchman, at \$600..... 600.00		
Hull, W. S..... Watchman, at \$600..... 600.00		
Collins, J. Burt..... } 441.33		
Lynch, Lewis M..... Messenger, at \$480..... 38.67		
Dagenhardt, G. A..... } 385.33		
Etheridge, Joseph W..... Messenger, at \$480..... 40.00		
Hammersley, J. J..... } 58.67		
McConica, C. C..... Messenger, at \$480..... 77.34		
Schuermann, C. C..... } 240.00		
Thompson, Elmer..... } 48.00		
Key, Richard C..... Messenger, at \$480..... 50.67		
Pierce, J. F..... } 37.33		
Sheehan, Frank J..... Messenger, at \$480..... 392.00		
Lingle, Albert F..... } 157.33		
Mann, Howard Q..... Messenger, at \$480..... 66.67		
Phillips, Ira G..... } 185.33		
Rich, F. H..... Messenger, at \$480..... 58.67		
Shippon, C. D..... } 480.00		
Taylor, James A..... Messenger, at \$480..... 40.00		
Townsend, Karl H..... } 440.00		
Frost, Fred C..... Messenger, at \$480..... 20.00		
Winkler, J. H..... } 460.00		
Wahlgren, M. G..... Messenger, at \$480..... 480.00		
Frost, Fred C..... Messenger boy at \$360..... 345.00		
Carroll, Louis W..... } 95.00		
Lynch, Lewis M..... Messenger boy at \$360..... 201.00		
Sheehan, Frank J..... } 28.00		
Townsend, Karl H..... } 2.00		
Whitlock, Harry T..... } 14.00		
Carroll, Louis W..... Messenger boy at \$300..... 25.00		
Lewis, Charles I. M..... } 264.17		
Crayton, George R..... Messenger boy at \$300..... 276.67		
Townsend, Karl H..... } 23.33		
Total..... 186,381.25		
Unexpended balance..... 3,068.75		
Total of above appropriation..... 189,450.00		
<i>General expenses, Bureau of Plant Industry, 1908, \$58,780.</i>	<i>General expenses, Bureau of Plant Industry, 1909, \$896,266.</i>	<i>General expenses, Bureau of Plant Industry, 1910, \$1,127,006.</i>
Salaries:	Salaries:	Salaries:
In Washington..... \$236,365.97	In Washington... \$280,000.00	In Washington... \$350,000.00
Out of Washington..... 123,587.27	Out of Washing- ton..... 280,000.00	Out of Washing- ton..... 350,000.00
Traveling and station and field expenses..... 359,953.24		
Miscellaneous supplies..... 92,017.60		
Stationery..... 57,572.15		
Furniture..... 6,953.12		
Apparatus, instruments, and laboratory material..... 7,609.13		
Rent..... 15,970.36		
Gas and electricity..... 11,862.72		
Express..... 2,910.46		
Freight..... 2,114.23		
Fuel..... 1,004.41		
Telegraph..... 2,697.87		
Telephone..... 709.64		
Total expenditures to September 30, 1908..... 561,699.07		
Less repayment to credit of appropriation..... 65.28		
Net expenditures to September 30, 1908..... 561,633.79		
Advances to temporary special disbursing agents..... 9,272.34		
Outstanding liabilities on September 30, 1908..... 12,834.27		
Balance to be turned back in Treasury (estimated)..... 1,039.60		
Total amount of above appropriation..... 584,780.00		
	Total amount of above appropriation..... 896,266.00	Total amount estimated .. 1,127,006.00
	NOTE.—Increase over 1908 of \$311,486, but the greater part of this sum was by the merging of the funds for "Grain investigations" and "Cotton boll-weevil investigations" with this appropriation. (See following pages.)	NOTE.—Increase over 1909 of \$230,740, of which \$5,740 is by transfer from statutory roll. Actual estimated increase, \$225,000.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Grain investigations, 1908, \$40,000.</i>		
Salaries:		
In Washington.....	\$3,735.01	
Out of Washington.....	15,478.58	
	\$24,213.59	
Traveling and station and field expenses.....	4,689.75	
Miscellaneous supplies.....	2,442.78	
Stationery.....	431.88	
Furniture.....	1,497.26	
Apparatus, instruments, and laboratory material.....	3,793.91	
Rent.....	1,948.53	
Gas and electricity.....	3.10	
Express.....	80.20	
Freight.....	18.86	
Telegraph and telephone.....	20.15	
Total expenditures to September 30, 1908.....	39,140.01	
Outstanding liabilities to September 30, 1908 (estimated).....	771.27	
Balance to be turned back in Treasury (estimated).....	88.72	
Total amount of above appropriation.....	40,000.00	
NOTE.—The above expenditures, classified in accordance with the suggestion of the Congressional Committee on Expenditures for this department, were necessary in prosecuting the important work of grain standardization, the projects under which are referred to in detail hereafter.		
<i>Cotton boll weevil investigations, 1907-8, \$35,632.42. a</i>		
Salaries, out of Washington.....	25,154.00	
Traveling and station and field expenses.....	10,010.40	
Miscellaneous supplies.....	415.40	
Stationery.....	22.25	
Rent.....	30.00	
Total expenditures to September 30, 1908.....	35,632.05	
Outstanding liabilities on September 30, 1908.....	.37	
Total amount of above appropriation.....	35,632.42	
NOTE.—In the agricultural appropriation act for the fiscal year 1909 the appropriation for "Grain investigations" was merged with that for "General expenses, Bureau of Plant Industry." The apportionment of the latter fund for the current fiscal year is stated on the preceding page.		
<i>Cotton boll weevil investigations, 1908, \$110,000.00. a</i>		
Salaries:		
In Washington.....	\$22,976.67	
Out of Washington.....	53,494.70	
	76,471.37	
Traveling and station and field expenses.....	18,716.34	
Miscellaneous supplies.....	8,196.77	
Stationery.....	1,054.72	
Furniture.....	1,473.56	
Apparatus, instruments, and laboratory material.....	1,236.72	
Rent.....	597.00	
Gas and electricity.....	54.00	
Express.....	197.55	
Freight.....	132.62	
Telegraph.....	70.41	
Telephone.....	93.70	
Total expenditures to September 30, 1908.....	108,294.76	
Less repayment to credit of appropriation.....	10.00	
Net expenditures to September 30, 1908.....	108,284.76	
Outstanding liabilities on September 30, 1908 (estimated).....	1,049.42	
Balance to be turned back in Treasury.....	665.82	
Total amount of above appropriation.....	110,000.00	
NOTE.—In the agricultural appropriation act for the fiscal year 1909 the appropriations for "Cotton boll weevil investigations" were merged with the appropriation for "General expenses, Bureau of Plant Industry." The apportionment of the latter fund for the current fiscal year is stated on a preceding page.		
<i>Purchase and distribution of valuable seeds, 1908, \$288,000.</i>		
Salaries:		
In Washington.....	\$46,303.66	
Out of Washington.....	5,689.79	
	51,993.45	
Traveling and station and field expenses.....	10,204.84	
Miscellaneous supplies.....	188,222.04	
Stationery.....	1,762.15	
Furniture.....	917.38	
Apparatus, instruments, and laboratory material.....	1,340.68	
Rent.....	1,640.00	
Gas and electricity.....	239.81	
Express.....	982.86	
Freight.....	3,349.38	
Total amount of above appropriation.....	288,000.00	
<i>Purchase and distribution of valuable seeds, 1909, \$258,000.</i>		
Salaries:		
In Washington.....	\$47,410.00	
Out of Washington.....	17,420.00	
	\$64,830.00	
Traveling and station and field expenses.....	28,590.00	
Miscellaneous supplies.....	149,280.00	
Stationery.....	2,000.00	
Furniture.....	1,200.00	
Apparatus, instruments, and laboratory material.....	1,500.00	
Rent.....	4,200.00	
Gas and electricity.....	300.00	
Total amount of above appropriation.....	258,000.00	
<i>Purchase and distribution of valuable seeds, 1910, \$243,680.</i>		
Salaries:		
In Washington.....	\$43,090.00	
Out of Washington.....	17,420.00	
	\$60,510.00	
Traveling and station and field expenses.....	18,590.00	
Miscellaneous supplies.....	149,280.00	
Stationery.....	2,000.00	
Furniture.....	1,200.00	
Apparatus, instruments, and laboratory material.....	1,500.00	
Rent.....	4,200.00	
Gas and electricity.....	300.00	
Total amount of above appropriation.....	243,680.00	

^a The amounts stated are exclusive of the sum of \$4,367.58 expended during the fiscal year 1907.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Purchase and distribution of valuable seeds, 1908, \$288,000—Continued.</i>	<i>Purchase and distribution of valuable seeds, 1909, \$258,000—Continued.</i>	<i>Purchase and distribution of valuable seeds, 1910, \$243,680—Continued.</i>
Fuel..... \$3,270.19	Express..... \$1,200.00	Express..... \$1,200.00
Telegraph..... 214.26	Freight..... 3,500.00	Freight..... 3,500.00
Telephone..... 86.98	Fuel..... 1,000.00	Fuel..... 1,000.00
Total expenditures to September 30, 1908..... 264,224.02	Telegraph..... 300.00	Telegraph..... 300.00
Less repayment to credit of appropriation..... 3.25	Telephone..... 100.00	Telephone..... 100.00
Net expenditures to September 30, 1908..... 264,220.77	Total amount of above ap- propriation (an increase over original appropria- tion for 1908 of \$20,000) ^a 258,000.00	Total amount estimated (a net decrease from 1909 of \$14,320)..... 243,680.00
Advances to temporary special disbursing agents..... 12,514.14		
Outstanding liabilities on September 30, 1908..... 8,969.61		
Balance to be turned back in Treasury (estimated)..... 2,395.48		
Total amount of above appropriation ^a 288,000.00		
^a The original appropriation for "Purchase and distribution of valuable seeds, 1908," was \$288,000 (agricultural appropriation act, March 4, 1907). On account of the loss sustained through fire in November, 1907, an additional sum of \$50,000 was appropriated (public resolution, January 8, 1908), making a total appropriation of \$288,000.	^a See note in 1908 column.	NOTE.—Of the above estimated decrease, \$4,320 is only an apparent decrease, this amount having been transferred to the statutory roll. The actual decrease (on foreign seed allotment) is therefore \$10,000. This is due to the fact that an agricultural exploration of Siberia, for which a special increase was granted for 1909, will have been completed by the close of that fiscal year.
<i>Pomological investigations, 1906, fund from sale of fruits and vegetables, \$1,779.40.</i>		
Miscellaneous supplies..... \$975.28		
Furniture..... 36.00		
Total expenditures during fiscal year ended June 30, 1908..... 1,011.28	As stated in the opposite column, the unexpended balance of \$768.12 is available until used. This will probably be expended during the current fiscal year for "Miscellaneous supplies."	No estimate for 1910.
Unexpended balance (available until used)..... 768.12		
Total amount of above appropriation..... 1,779.40		

OFFICES, LABORATORIES, AND PROJECTS.

ADMINISTRATION: OFFICE OF CHIEF OF BUREAU, OFFICE OF ASSISTANT CHIEF, OFFICE OF RECORDS, EDITORIAL OFFICE.	ADMINISTRATION: OFFICE OF CHIEF OF BUREAU, OFFICE OF ASSISTANT CHIEF, OFFICE OF RECORDS, EDITORIAL OFFICE.	ADMINISTRATION: OFFICE OF CHIEF OF BUREAU, OFFICE OF ASSISTANT CHIEF, OFFICE OF RECORDS, EDITORIAL OFFICE.
Salaries, statutory..... \$40,769.76	Salaries, statutory..... \$43,480.00	Salaries, statutory..... \$43,480.00
Salaries, lump fund..... 34,000.00	Salaries, lump fund..... 32,000.00	Salaries, lump fund..... 32,000.00
Stationery, furniture, supplies, etc..... 14,750.00	Stationery, furniture, supplies, etc..... 15,000.00	Stationery, furniture, supplies, etc..... 15,000.00
Miscellaneous expenses, rent, freight, etc..... 23,717.22	Miscellaneous expenses, rent, freight, etc..... 2,547.00	Miscellaneous expenses, rent, freight, etc..... 2,547.00
Traveling expenses..... 1,338.02	Traveling expenses..... 1,500.00	Traveling expenses..... 1,500.00
Total..... 114,575.00	Total..... 94,527.00	Total..... 94,527.00
The expenses incurred under the above headings are for the necessary administrative expenditures of the bureau, such as the conduct of correspondence, the auditing of accounts, the preparation of publications for printing, and the accounting for all funds, supplies, etc.		
LABORATORY OF PLANT PATHOLOGY. (Erwin F. Smith, pathologist in charge.)	LABORATORY OF PLANT PATHOLOGY. (Erwin F. Smith, pathologist in charge.)	LABORATORY OF PLANT PATHOLOGY. (Erwin F. Smith, pathologist in charge.)
Salaries, statutory..... \$4,044.49	Salaries, statutory..... \$3,900.00	Salaries, statutory..... \$3,900.00
Salaries, lump fund..... 15,146.89	Salaries, lump fund..... 15,530.00	Salaries, lump fund..... 16,500.00
Stationery, furniture, supplies, etc..... 500.00	Stationery, furniture, supplies, etc..... 3,797.92	Stationery, furniture, supplies, etc..... 4,527.92
Miscellaneous expenses—freight, express, etc..... 183.52	Miscellaneous expenses—freight, express, etc..... 400.00	Miscellaneous expenses, freight, express, etc..... 400.00
Traveling and station and field expenses..... 846.07	Traveling and station and field expenses..... 2,000.00	Traveling and station and field expenses..... 1,500.00
Total..... 20,720.97	Total..... 25,627.92	Total..... 26,827.92
PROJECTS.	PROJECTS.	PROJECTS.
(1) Central laboratory of plant pathology (Doctor Smith). This is the working laboratory for all pathological investigators in the bureau. The laboratory work is largely technical, including at the present time the study of diseases of the sugar cane, coconut, cotton, corn, olives, potatoes, tomatoes, tobacco, cucumbers, squash, cabbage, alfalfa, and many other plants. Material from all parts of the United States is examined and advice for treatment given..... 14,438.47	(1) Central laboratory of plant pathology..... 19,446.92	(1) Central laboratory of plant pathology..... 20,446.92
Results.—A number of special studies of various bacterial and other diseases have been made. Two bulletins have been issued, one on the olive tubercle, the other on the Granville tobacco wilt. Studies of the crown-gall diseases of various plants have been continued by the pathologists. The organism causing this disease (<i>Bacterium tumefaciens</i> Smith and Townsend) has been found		

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Bureau of Plant Industry—Continued.
OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<p style="text-align: center;">LABORATORY OF PLANT PATHOLOGY—Continued.</p> <p style="text-align: center;">PROJECTS—continued.</p> <p>to have very simple, generalized habits of life. It is able to attack a surprisingly large number of plants, pure cultures of it having been successfully inoculated into plants of twelve different families. Probably all of the common crown-galls of orchard fruits, and of other cultivated plants, are due to it or to closely related forms. Farmers have been advised against planting trees infected with crown-galls, since they are not likely to make durable orchards and moreover will distribute infection where it does not now exist. A bulletin is in preparation.</p> <p>(2) Pathological collections (Flora W. Patterson, mycologist). These include the mycological herbarium and the identification and inspection of pathological material received. In connection with the pathological investigations of the bureau a collection of all the fungi connected with plant diseases obtainable is maintained, and this collection now contains approximately 50,000 specimens..... \$5,580.00</p> <p><i>Results.</i>—The mycological and related work has continued in charge of Mrs. Flora W. Patterson, mycologist. With the increase of the pathological work of the bureau, the necessity of maintaining and increasing these collections is extremely urgent. Additions of American species have been made by the preservation of material sent in for examination by correspondents, members of the bureau force, experiment-station workers, and others. Many foreign species have also been acquired through plant introduction and other work. These collections are primarily of importance for reference in connection with all of the pathological work of the bureau. In addition to the work connected with these collections, inspections have been made of all material received or sent out by the office of seed and plant introduction, and also of the plants in the department greenhouses. Many specimens have accrued to the collections in this manner, and the danger of introducing or spreading diseases has been materially lessened.</p> <p>(3) Investigations of rice blast and other diseases of rice (Haven Metcalf, pathologist). This work is conducted in the laboratory and in South Carolina for the purpose of finding a means of controlling blast and other diseases of rice which have caused damage to the rice fields of the South. Fertilizer and soil treatment experiments on lands subject to blast are a part of the work..... 702.50</p> <p><i>Results.</i>—Experiments with reference to the control of the disease known as "rice-blast" have been continued by Dr. Haven Metcalf, pathologist in charge of the laboratory of forest pathology. A test is being conducted with a large number of varieties of rice for the purpose of finding, if possible, varieties resistant to the attacks of the fungus causing the disease. This work will be continued, and an investigation will be made of the "brusone" disease of rice in Italy, and if it is found identical with the rice-blast, resistant varieties will be imported from Italy. Methods for the control of the disease in Europe will at the same time be introduced in this country.</p> <p style="text-align: center;">INVESTIGATIONS OF DISEASES OF COTTON, TRUCK CROPS, ETC.</p> <p style="text-align: center;">(W. A. Orton, pathologist in charge.)</p> <p>Salaries, statutory..... \$1,000.00 Salaries, lump fund..... 7,216.84 Stationery, furniture, supplies, etc..... 984.62 Miscellaneous expenses, freight, express, etc..... 50.00 Traveling and station and field expenses..... 2,540.91 Total..... 11,792.37</p> <p style="text-align: center;">PROJECTS.</p> <p>(1) Cotton disease investigations (Mr. Orton and Dr. C. L. Shear, pathologist). This work includes the study of cotton wilt, anthracnose, blight, rust, shedding, root-rot, etc.; the breeding of varieties of cotton resistant to wilt, root-knot, etc.; and demonstrations of the control of the various diseases affecting cotton..... 5,496.62</p> <p><i>Results.</i>—Resistant varieties of sea-island cotton have been developed as a result of this work. Methods for the improvement of cotton in Georgia and Florida have been developed, and a Farmers' Bulletin has been published showing that seed selection, improvement of cultural conditions, and more careful handling of the product will fully remedy existing conditions. It has been shown that the Texas root-rot of cotton can be effectively controlled by deep fall plowing and the rotation of crops. This part of the work has been practically brought to completion.</p>	<p style="text-align: center;">LABORATORY OF PLANT PATHOLOGY—Cont'd.</p> <p style="text-align: center;">PROJECTS—continued.</p> <p>(2) Pathological collections \$5,381.00</p> <p>(3) Investigation of rice blast and other diseases of rice..... \$800.00</p> <p><i>NOTE.</i>—This work will be transferred to another project after the close of the present fiscal year. (See project for "Rice investigations" under heading "Grain investigations, post.")</p> <p style="text-align: center;">INVESTIGATIONS OF DISEASES OF COTTON, TRUCK CROPS, ETC.</p> <p style="text-align: center;">(W. A. Orton, pathologist in charge.)</p> <p>Salaries, statutory..... \$800.00 Salaries, lump fund..... 7,210.00 Stationery, furniture, supplies, etc..... 299.00 Miscellaneous expenses, freight, express, etc..... 50.00 Traveling and station and field expenses..... 2,500.00 Total..... 10,859.00</p> <p style="text-align: center;">PROJECTS.</p> <p>(1) Cotton disease investigations.. 2,237.50</p>	<p style="text-align: center;">LABORATORY OF PLANT PATHOLOGY—Cont'd.</p> <p style="text-align: center;">PROJECTS—continued.</p> <p>(2) Pathological collections \$6,381.00</p> <p style="text-align: center;">INVESTIGATIONS OF DISEASES OF COTTON, TRUCK CROPS, ETC.</p> <p style="text-align: center;">(W. A. Orton, pathologist in charge.)</p> <p>Salaries, statutory..... \$800.00 Salaries, lump fund..... 9,500.00 Stationery, furniture, supplies, etc..... 1,000.00 Miscellaneous expenses, freight, express, etc..... 100.00 Traveling and station and field expenses..... 3,259.00 Total..... 14,659.00</p> <p style="text-align: center;">PROJECTS.</p> <p>(1) Cotton disease investigations.. 2,737.50</p>

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
INVESTIGATIONS OF DISEASES OF COTTON, TRUCK CROPS, ETC.—Con.	INVESTIGATIONS OF DISEASES OF COTTON, TRUCK CROPS, ETC.—Continued.	INVESTIGATIONS OF DISEASES OF COTTON, TRUCK CROPS, ETC.—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(2) Cowpea disease investigations (Mr. Orton). This work is a continuation of work begun several years ago in the development of varieties of cowpeas resistant to disease, particularly to wilt and root-knot. The project derives its main importance from the need of such varieties of the cowpea to assist in the control, through rotation of crops, of the root-knot of cotton, the peach, and other crops grown in the South. . . . \$600.00 <i>Results.</i> —A thorough knowledge of the wilt disease of the cowpea has been secured, and a strain resistant to this disease and to root-knot has been produced. Wilt-resistant varieties have also been produced, notably the hybrids of the Iron with other varieties. The value of these resistant cowpeas has proved very great on account of the increasing prevalence of root-knot in sandy soil throughout the South, which has made it necessary to abandon all other varieties of cowpeas.	(2) Cowpea disease investigations. \$710.00	(2) Cowpea disease investigations. \$1,010.00
(3) Potato disease investigations (Mr. Orton). This work is conducted in cooperation with the Vermont Experiment Station and consists of laboratory and field researches on the life history of the late blight fungus and on the underlying reasons for disease resistance shown by certain varieties. . . . 1,000.00 <i>Results.</i> —Several facts have been learned that will throw light on the life history of the late blight fungus. Decided resistance to blight has been found in several varieties.	(3) Potato disease investigations. 1,475.50	(3) Potato disease investigations. 2,475.50
(4) Breeding watermelons for wilt resistance (Mr. Orton). This work is being conducted in North Carolina and South Carolina, cooperation with the North Carolina Experiment Station being in effect. The objects are to develop and distribute varieties of watermelons which will resist the wilt disease. . . . 900.00 <i>Results.</i> —This work has resulted in combining the disease resistant quality of the citron with the watermelon. Selections of resistant strains have continued for several years, and a strain which comes largely true has been secured as a result of our work in South Carolina. A commercial test of this variety has been made, proving it to be of good quality and highly resistant to wilt. Another year of selection will bring the variety to a point where the distribution of seed can be begun.	(4) Breeding watermelons for wilt resistance. . . . 920.00	(4) Breeding watermelons for wilt resistance. . . . 920.00
(5) Investigation of malnutrition of truck crops (L. L. Harter, assistant). This work consists of a study of the effects of overfertilization of truck crops, particularly of the physiological and pathological effects of continued excessive applications of commercial fertilizers on various vegetables. . . . 500.00 <i>Results.</i> —This work has been only recently begun, but promises valuable results bearing upon the question of fertilization of garden crops.	(5) Investigation of malnutrition of truck crops. . . . 1,935.00	(5) Investigation of malnutrition of truck crops. . . . 2,435.00
(6) Plant disease survey (Mr. Orton and Miss Adeline Ames, cooperating with officers of a number of the state experiment stations). This work consists of a comprehensive annual survey of the plant diseases prevalent in the United States. The object is the collection of information and material regarding the annual prevalence of all plant diseases; to learn the distribution of new diseases; to study epidemics and their relation to weather and other factors; and to map and preserve permanent records of all such diseases. . . . 1,500.00 <i>Results.</i> —A great quantity of valuable data regarding the distribution and prevalence of various plant diseases has been secured, and in many cases the factors influencing their spread have been learned. The Department is thus kept informed as to the need for further investigations along pathological lines.	(6) Plant disease survey. . . . 1,581.00	(6) Plant disease survey. . . . 1,581.00
(7) Studies of various plant diseases (Mr. Orton). This work includes various diseases of beans, cucumbers, lettuce, and other truck crops; also of tobacco, the pecan, mulberry, and other plants. . . . 1,755.75 <i>Results.</i> —Evidence has been accumulated showing that pecan rosette and scab are serious diseases, and methods of their control are being worked out. Demonstrations of the control of diseases of cucumbers, melons, and other crops have been carried out with success.	(7) Studies of various plant diseases. . . . 2,000.00	(7) Studies of various plant diseases. . . . 3,500.00
INVESTIGATIONS OF DISEASES OF FRUITS. (M. B. Waite, pathologist in charge.)	INVESTIGATIONS OF DISEASES OF FRUITS. (M. B. Waite, pathologist in charge.)	INVESTIGATIONS OF DISEASES OF FRUITS. (M. B. Waite, pathologist in charge.)
Salaries, statutory. . . . \$766.66 Salaries, lump fund. . . . 17,726.82 Stationery, furniture, supplies, etc. . . . 800.00 Miscellaneous expenses, freight, express, etc. . . . 57.06 Traveling and station and field expenses. . . . 7,308.70 Total. . . . 26,659.24	Salaries, statutory. . . . \$1,200.00 Salaries, lump fund. . . . 19,500.00 Stationery, furniture, supplies, etc. . . . 1,150.00 Miscellaneous expenses, freight, express, etc. . . . 64.33 Traveling and station and field expenses. . . . 10,000.00 Total. . . . 31,914.33	Salaries, statutory. . . . \$1,500.00 Salaries, lump fund. . . . 24,000.00 Stationery, furniture, supplies, etc. . . . 1,200.00 Miscellaneous expenses, freight, express, etc. . . . 74.33 Traveling and station and field expenses. . . . 10,140.00 Total. . . . 36,914.33

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
INVESTIGATIONS OF DISEASES OF FRUITS—Continued.	INVESTIGATIONS OF DISEASES OF FRUITS—Con.	INVESTIGATIONS OF DISEASES OF FRUITS—Con.
PROJECTS.	PROJECTS.	PROJECTS.
(1) Eradication of pear blight (Mr. Waite). This work was originally started in the South, but is now chiefly conducted in California, with a view to preventing the destruction of the pear orchards of the State, which are valued at many millions of dollars. Pear blight has been and is devastating these orchards, and the department, in cooperation with the state authorities, has been working to check it. The work consists in practical orchard demonstrations of methods of eradicating the blight.....	(1) Eradication of pear blight (Mr. Waite)..... \$8,914.33	(1) Eradication of pear blight (Mr. Waite)..... \$10,914.33
<i>Results.</i> —In Georgia and Texas, where this work was carried on for three years, it has been demonstrated that the blight can be controlled by proper cutting out of the hold-over blight. Similar results have been obtained in California. The systematic work undertaken in eradicating the blight from the orchards through winter pruning has led to beneficial results. The progressive orchardists who have carried on the work thoroughly have succeeded in holding the disease in check and in securing a profitable crop of fruit from the treated orchards. Where careless treatment was practiced, or no treatment at all, many orchards were destroyed. Great progress has been made in educating the growers as to the methods and importance of the process.....		
\$6,659.24		
(2) Demonstration work in the control of apple diseases by spraying (W. M. Scott, pathologist). This work is chiefly conducted in the Ozark Mountain region, having for its objects the demonstration of methods of controlling bitter-rot, scab, and other diseases prevalent in that section, which is an important fruit region. Similar work has also been carried on in Nebraska and Virginia.....	(2) Demonstration work in the control of apple diseases by spraying (W. M. Scott, pathologist)..... 6,000.00	(2) Demonstration work in the control of apple diseases by spraying (W. M. Scott, pathologist)..... 7,500.00
<i>Results.</i> —In Virginia a successful method of controlling apple bitter-rot has been demonstrated in the Albemarle-pippin belt. In the Ozark Mountain region, where bitter-rot has been very prevalent, the orchards treated according to the department's method lost only from 2 to 10 per cent of their fruit, while the untreated orchards lost a very large percentage of their crop. The same is true in regard to the fruit blotch, which is the most serious disease of that section. It has been estimated that these demonstrations have saved more than a million dollars to the fruit interests of the Ozarks. These demonstrations have led to the general adoption of proper methods for controlling orchard diseases in this region.		
The work in Nebraska has also yielded very satisfactory results, the control of the diseases in the sprayed orchards being practically complete. In all of this work combination treatments have been made to prevent both diseases caused by fungi and injuries produced by insects, in this phase of the work the Bureau of Plant Industry cooperating with the Bureau of Entomology.		
4,000.00		
(3) Investigations of diseases of small fruits, grapes, cranberries, etc. (C. L. Shear, pathologist). This work is devoted chiefly to the diseases of the grape, although an exhaustive investigation of cranberry diseases has been about completed, and a study of the diseases of other small fruits has been started. The work on grape diseases is at present conducted in the grape regions of Pennsylvania, New York, and Michigan, in cooperation with the state experiment stations. Many of the diseases of the grape are in great need of further investigation, and the work consists in the study of the parasites causing the diseases, together with spraying experiments in accordance with the most recent developments of fungicides, and machinery and demonstrations of the practical efficiency of such methods.....	(3) Investigations of diseases of small fruits, grapes, cranberries, etc. (C. L. Shear, pathologist)..... 7,000.00	(3) Investigations of diseases of small fruits, grapes, cranberries, etc. (C. L. Shear, pathologist)..... 7,500.00
<i>Results.</i> —The work on cranberry diseases, which has been in progress for several years, has resulted in the saving of from 90 to 95 per cent of the fruit by spraying. Bulletins describing the diseases and methods of their control have been issued and placed in the hands of cranberry growers who are successfully using the methods recommended and demonstrated.		
The work on grape diseases has resulted in demonstrating that the black rot and other fungous diseases which have threatened to cause the abandonment of vineyards in some sections can be successfully and profitably controlled even under the most adverse climatic conditions.		
7,100.00		
(4) Investigations of diseases of the peach and plum. This work consists in practical demonstrations of the eradication of the "little peach" disease in Michigan and New York, of the control of peach blight in California, investigations of the rot of peaches and plums, of various diseases of the Japanese plum, and of the shot-hole and twig-rot diseases of the peach and apricot, and an investigation of peach-leaf injury by spraying with fungicides.....	(4) Investigations of diseases of the peach and plum..... 6,000.00	(4) Investigations of diseases of the peach and plum..... 6,500.00
<i>Results.</i> —"Little peach" disease (Mr. Waite). In the work on the "little peach" disease, which has been conducted for the past three years in the Michigan peach belt, it has been demonstrated that it can be controlled by the eradication method and that it belongs to the		
5,500.00		

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
INVESTIGATIONS OF DISEASES OF FRUITS—Continued. PROJECTS—continued. <p>same group of diseases as does the disease known as "peach yellows." Where eradication has been properly carried out the orchards have been saved. The work in Michigan has been practically completed and the same methods have been applied in the New York peach belt with success.</p> <p>In California the experiments to control the very serious disease there known as peach blight have shown that the disease can be completely controlled by the use of standard Bordeaux mixture, or lime and sulphur wash applied early in the fall. The methods recommended by the department were widely used in California the past season with complete success, and it has been estimated that the treatment has saved many millions of dollars.</p> <p>Peach and plum rot (Mr. Scott). Some results have been obtained in the study of the brown rot of the peach and plum, especially of the life history of the fungus on old peaches and in the soil. It has been shown that stirring the soil prevents the formation of these fruiting bodies.</p> <p>In the investigation of peach foliage injury by spraying it has been found that a sulphur wash made by combining lime and sulphur with no other heat than that produced by the slacking of the lime, gives a preparation which is not injurious to the foliage and which will prevent scab and reduce peach rot to 10 per cent on the sprayed trees, whereas unsprayed trees show about 75 per cent of the disease.</p> <p>(5) Investigations of miscellaneous diseases of fruits and fruit trees (Mr. Waite). This work includes the general identification of diseases and the giving of advice as to the preparation and use of fungicides for treating them; a study of winter injury to fruit trees, and of the pollination of orchard fruits; an investigation of the chlorotic disease of fruits; an investigation of the anthracnoses of fruits, and various other miscellaneous studies. \$4,000.00</p> <p><i>Results.</i>—In the study of winter injury it has been shown that in many cases trees can be saved by judicious pruning even though they are apparently killed by the cold. The pollination investigations have proven the necessity of planting two or more varieties alternately rather than large blocks of single varieties in order to insure a full crop of fruit.</p> <p>The complete life cycle of 12 forms of anthracnoses from different plants have been successfully worked out and many new facts regarding their development and relationship discovered.</p>	INVESTIGATIONS OF DISEASES OF FRUITS—Con. PROJECTS—continued. <p>(5) Investigations of miscellaneous diseases of fruits and fruit trees. \$4,000.00</p>	INVESTIGATIONS OF DISEASES OF FRUITS—Con. PROJECTS—continued. <p>(5) Investigations of miscellaneous diseases of fruits and fruit trees. \$4,500.00</p>
LABORATORY OF FOREST PATHOLOGY. (Haven Metcalf, pathologist in charge.) Salaries, statutory..... \$1,198.67 Salaries, lump fund..... 4,065.00 Stationery, furniture, supplies, etc..... 1,700.00 Miscellaneous expenses, freight, express, etc..... 283.05 Traveling and station and field expenses..... 1,973.48 Total..... 9,220.20	LABORATORY OF FOREST PATHOLOGY. (Haven Metcalf, pathologist in charge.) Salaries, statutory..... \$1,200.00 Salaries, lump fund..... 7,500.00 Stationery, furniture, supplies, etc..... 1,600.00 Miscellaneous expenses, freight, express, etc..... 296.00 Traveling and station and field expenses..... 2,500.00 Total..... 13,096.00	LABORATORY OF FOREST PATHOLOGY. (Haven Metcalf, pathologist in charge.) Salaries, statutory..... \$1,200.00 Salaries, lump fund..... 10,000.00 Stationery, furniture, supplies, etc..... 2,600.00 Miscellaneous expenses, freight, express, etc..... 296.00 Traveling and station and field expenses..... 4,000.00 Total..... 18,096.00
PROJECTS. <p>(1) Investigation of the crown-gall disease of fruit and forest trees (George C. Hedgecock, assistant). This work has included chiefly the crown-gall diseases of the peach, apple, plum, and grape. These diseases, which consist of both hard and soft galls, as well as the hairy-root disease, have caused a great loss to nurserymen and orchardists every year. The crown-gall diseases of many types of plants have been studied in connection with this work. 1,200.00</p> <p><i>Results.</i>—It has been shown that the apple crown-gall can be prevented by careful attention to root grafting, and by wrapping the grafts with cloth, rubber, or paper. A bulletin giving instructions as to the wrapping of grafts has been published and distributed. It has also been found that the amount of crown-gall increases but little on trees in nursery rows as they grow older. The hairy-root, however, apparently increases with age.</p> <p>The hard crown-gall and hairy-root of the apple are chiefly scion diseases, and experiments indicate that they may be lessened by careful selection of scions from healthy trees. It has been found that the soft crown-gall of the rose, peach, blackberry, and raspberry may be communicated from these plants to the pear, producing a similar disease. It is proposed to continue work on the hard gall.</p>	PROJECTS. <p>(1) Investigation of the crown-gall disease of fruit and forest trees. 1,000.00</p>	PROJECTS. <p>(1) Investigation of the crown-gall disease of fruit and forest trees. 500.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
LABORATORY OF FOREST PATHOLOGY—Continued.	LABORATORY OF FOREST PATHOLOGY—Cont'd.	LABORATORY OF FOREST PATHOLOGY—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
It has been shown that the crown-gall of the grape is contagious, and may be spread by irrigation from vineyard to vineyard. American varieties of grapes are very resistant to the disease, and in order to avoid it the European type of grape in California and other sections may be grown on American roots.		
(2) Investigation of the blue stain of coniferous and other woods (Doctor Metcalf). The object of this work is to ascertain the cause of the blue stain disease of coniferous and other woods used for lumbering purposes.....	(2) Investigation of the blue stain of coniferous and other woods. \$2,000.00	(2) Investigation of the blue stain of coniferous and other woods \$3,000.00
Results.—The work on this trouble, which was started several years ago, has shown that the staining is caused by fungi growing in the sapwood. These fungi are liable to get into the wood at any time, even before the tree is dead, but especially after it has been cut and sawed into lumber. Tests which were carried out last season showed that the trouble could be controlled by the use of alkaline solutions, simply dipping the lumber, or by the use of corrosive sublimate solution. The danger involved in the latter method, however, practically precludes its use. The cost of treatment with alkalis is only about 10 cents per 1,000 feet of lumber and this method appears to be the most practical one proposed.		
(3) Study of diseases of coniferous trees (Doctor Metcalf). This work is principally a study of the life history of the fungi causing the various diseases of pines. Especial attention is given to the study of the wood-rot diseases of the trees in the national forests in the Western States in cooperation with the Forest Service....	(3) Study of diseases of coniferous trees..... 2,000.00	(3) Study of diseases of coniferous trees..... 3,500.00
Results.—Data are being secured as to the relative susceptibility of the different species of pine to red-heart and other diseases, with a view to furnishing information to those engaged in reforestation, as to the most profitable age at which to cut diseased trees, and also as to the rapidity of spread and means of infection.		
(4) Investigation of diseases of oaks and other hard woods (Doctor Metcalf). This work is chiefly a study of the various diseases of these woods prevalent in the Mississippi Valley and adjacent regions. The work, however, has been carried on to some extent in other localities.....	(4) Investigations of diseases of oaks and other hard woods..... 2,000.00	(4) Investigation of diseases of oaks and other hard woods..... 3,000.00
Results.—Considerable information has been gathered in regard to the various diseases of the poplar, oak, and other hard woods and the means of preventing their spread. A bulletin on this subject is now ready for publication.		
(5) Study of miscellaneous diseases of forest trees (Doctor Metcalf). This work includes a study of the damping-off disease of coniferous seedlings which is prevalent in nurseries of these trees; an investigation of the stain of wood pulp, which is causing considerable loss to paper makers; a study of foliage injury of white pines, which is causing great damage; and investigations of the effect of sulphur gases on forest, shade, and ornamental trees.....	(5) Study of miscellaneous diseases of forest trees..... 3,000.00	(5) Study of miscellaneous diseases of forest trees..... 4,500.00
Results.—The cause of the damping-off disease has been found, and a method of controlling the disease is being devised. The stain of wood pulp has been found to be due to a fungus, and methods of preventing it are being worked out. It is probable that it can be controlled simply by proper ventilation.		
(6) Investigation of diseases of ornamental and shade trees and shrubs (Doctor Metcalf). This work includes studies of the diseases of our common ornamental, shade, park, and street trees. The most important disease now under investigation is caused by a fungus which attacks and destroys the bark tissues of the chestnut tree, bringing about in a short time the death of the whole tree. The disease now threatens the existence of all chestnut forests and orchards in the United States.....	(6) Investigation of diseases of ornamental and shade trees and shrubs..... 2,000.00	(6) Investigation of diseases of ornamental and shade trees and shrubs..... 2,500.00
Results.—The Japanese chestnuts have been shown to be immune to the disease above described, and can therefore be planted freely in orchards and as ornamentals. It has also been found that individual trees of sufficient value to pay for treatment can be saved by a cutting-out process.		
(7) Study of the occurrence and prevalence of diseases of trees (Doctor Metcalf). This includes the collection of data each year as to the occurrence of tree diseases in all parts of the United States. A record of this kind will be invaluable to the work of forest pathology, as it will aid in tracing the origin and spread of new diseases.....	(7) Study of the occurrence and prevalence of disease of trees..... 1,096.00	(7) Study of the occurrence and prevalence of disease of trees..... 1,096.00
Results.—Data are being collected which will be of great value in giving advice as to the treatment of various tree diseases, as well as in determining the seriousness of new diseases reported as breaking out in various parts of the country.		

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
SOIL BACTERIOLOGY AND WATER PURIFICATION INVESTIGATIONS.	SOIL BACTERIOLOGY AND WATER PURIFICATION INVESTIGATIONS.	SOIL BACTERIOLOGY AND WATER PURIFICATION INVESTIGATIONS.
(Karl F. Kellerman, physiologist in charge.)	(Karl F. Kellerman, physiologist in charge.)	(Karl F. Kellerman, physiologist in charge.)
Salaries, statutory..... \$1,350.00	Salaries, statutory..... \$1,200.00	Salaries, statutory..... \$1,200.00
Salaries, lump fund..... 10,595.23	Salaries, lump fund..... 12,470.00	Salaries, lump fund..... 12,470.00
Stationery, furniture, supplies, etc..... 2,960.75	Stationery, furniture, supplies, etc..... 2,546.00	Stationery, furniture, supplies, etc..... 2,546.00
Miscellaneous expenses, freight, express, etc..... 150.00	Miscellaneous expenses, freight, express, etc..... 200.00	Miscellaneous expenses, freight, express, etc..... 200.00
Traveling and station and field expenses..... 1,292.12	Traveling and station and field expenses..... 2,500.00	Traveling and station and field expenses..... 2,500.00
Total..... 16,348.10	Total..... 18,916.00	Total..... 18,916.00
PROJECTS.	PROJECTS.	PROJECTS.
1) General laboratory and office work (Mr. Kellerman). This project includes the maintenance of laboratory facilities, the conducting of correspondence, and various other details connected with the investigations in soil bacteriology and water purification.... <i>Results.</i> —The results under this project are reflected in the progress noted hereafter under the various field and laboratory projects.	(1) General laboratory and office work..... 4,501.00	(1) General laboratory and office work..... 4,501.00
2) Soil bacteriology investigations (Mr. Kellerman). This work includes the isolation and study of the bacteria concerned in nitrification and the investigation of their rôle in plant nutrition; the isolation of various types of soil bacteria and correlation of their economic value; a study of the gas production of bacteria; and investigations of the probable correlation of bacteriological activity in the soil with cultural conditions. The work includes the whole question of the relation of bacteria found in soils to fertility and crop production..... <i>Results.</i> —The investigations in general soil bacteriology, especially in the Great Plains region, are yielding some interesting results. The nitrifying power of western soils seems considerably higher than that of eastern soils, and this seems to be due to two reasons: First, because the nitrifying bacteria themselves are more numerous and more active in western than in eastern soils; and second, because denitrifying bacteria are very much fewer in western soils than in eastern soils. The importance of this in crop production is obvious, and as our research work develops further we hope to discover the conditions under which nitrification can be maintained at a maximum during the growing season of crops. In our laboratory experiments we have found that under control conditions denitrifying bacteria can be made injurious to seedling plants of several kinds. During the present year this investigation will be duplicated as nearly as possible under field conditions to determine how serious and how general an injury to crops may be due to bacterial action.	(2) Soil bacteriology investigations..... 6,882.00	(2) Soil bacteriology investigations..... 6,882.00
3) Experiments with legume bacteria (Mr. Kellerman). This work consists of the distribution of pure liquid cultures of nitrogen-fixing bacteria for inoculating leguminous plants; the study of the conditions under which nodule-forming bacteria are unable to form nodules; the breeding and selection of more virile types of nodule-producing organisms; and the study of the life history of the nitrogen-fixing bacteria, especially that of the root nodule of the leguminosæ. <i>Results.</i> —The distribution of pure cultures of the nodule-forming organism for legumes has been continued and with slightly better success than in previous years. Experiments have been carried on with types of soil which because of peculiar conditions prevented the growth of the proper legume bacteria and consequently made it impossible to grow leguminous crops. By the preparation of extracts of the soil and gradually adapting the nodule-forming organisms to the peculiar conditions we have been able in some cases to satisfactorily inoculate the legume in regions heretofore inimical to pure culture inoculation. A bulletin describing some of these conditions is in press. In some other regions we have evidence that certain other bacteria must be present before the nodule-forming organism can be of much benefit to legumes. Experiments upon this subject are under way, and during the coming year it is hoped that both the chemical and the bacteriological questions involved in this work may be solved. It is proposed also to undertake some investigations concerning the influence of climate and temperature upon the type of organism. Investigations upon the value of inoculated legumes as green manures for tobacco are under way, and it is believed that by these methods a large saving will be effected by reducing the necessity of commercial nitrogenous fertilizers. A circular upon this subject has been issued.	(3) Experiments with legume bacteria..... 4,982.00	(3) Experiments with legume bacteria..... 4,982.00

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
SOIL BACTERIOLOGY AND WATER PURIFICATION INVESTIGATIONS—Continued.	SOIL BACTERIOLOGY AND WATER PURIFICATION INVESTIGATIONS—Continued.	SOIL BACTERIOLOGY AND WATER PURIFICATION INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(4) Water purification investigations (Mr. Kellerman). This includes demonstrations of the copper treatment to eradicate algae from farm water supplies. This work is a result of preliminary experiments on ice ponds, pleasure lakes, etc.; a study of the effect of copper upon fish and fish eggs, in cooperation with the Bureau of Fisheries; of the value of copper as a disinfectant in water supplies; and of the copper and chlorine treatment of sewage effluents immediately before their discharge into streams as a means of preventing dangerous bacterial contaminations of public water supplies.....	(4) Water purification investigations..... \$2,551.00	(4) Water purification investigations..... \$2,551.00
\$4,106.01		
<i>Results.</i> —The investigations in water purification are now confined entirely to farm water supplies. From the results secured in preliminary studies it is believed that important general recommendations can be made for the improvement of farm sanitation. We have found that there is unfortunately a need for improvement in the average farm condition, and it will be impossible to depend upon a chemical treatment for these bacterial pollutions. Although the lakes in farms containing odor-producing algae are rare, we have had our usual success in eradicating these growths by the copper method. Our previous investigations upon the disinfection of sewage, reported in Bulletin 115, are now being put to practical use by the state board of health of Ohio. A Farmers' Bulletin is now being prepared outlining conditions and suggesting improvements.		
PLANT LIFE HISTORY INVESTIGATIONS.	PLANT LIFE HISTORY INVESTIGATIONS.	PLANT LIFE HISTORY INVESTIGATIONS.
(Walter T. Swingle, physiologist in charge.)	(Walter T. Swingle, physiologist in charge.)	(Walter T. Swingle, physiologist in charge.)
Salaries, statutory..... \$2,790.00	Salaries, statutory..... \$1,660.00	Salaries, statutory..... \$3,420.00
Salaries, lump-fund..... 13,690.78	Salaries, lump-fund..... 18,000.00	Salaries, lump-fund..... 19,000.00
Stationery, furniture, supplies, etc..... 2,078.24	Stationery, furniture, supplies, etc..... 844.25	Stationery, furniture, supplies, etc..... 1,000.00
Miscellaneous expenses, freight, express, etc..... 500.00	Miscellaneous expenses, freight, express, etc..... 500.00	Miscellaneous expenses, freight, express, etc..... 500.00
Traveling and station and field expenses..... 4,412.43	Traveling and station and field expenses..... 5,000.00	Traveling and station and field expenses..... 7,084.25
Total..... 23,471.45	Total..... 26,004.25	Total..... 31,004.25
PROJECTS.	PROJECTS.	PROJECTS.
(1) Establishment of date culture and study of the life history of the date palm (Mr. Swingle). The object is to bring about the establishment of date culture on a commercial scale in the United States, and particularly to investigate the life history of the date palm with reference to the different varieties and the methods of culture best adapted to American conditions.....	(1) Establishment of date culture and study of the life history of the date palm..... 4,310.00	(1) Establishment of date culture and study of the life history of the date palm..... 5,310.00
3,500.00		
<i>Results.</i> —The date palms in the experimental garden at Mecca, Cal., which are now from 2 to 3 years old, have commenced to fruit freely, and the famous Deglet Noor and a number of other choice varieties have ripened perfectly in spite of an unfavorable season. There is now positive proof that first-class table dates, far superior to any now imported from abroad, can be produced in this part of California. The four other cooperative date gardens—in California, Arizona, and Texas—are making excellent showings, and a number of fine dates have been ripened at these gardens. In cooperation with private individuals, thousands of date seedlings are being propagated in the Southwest; and much interest has been taken by growers in the planting of seedling date orchards in the hope of securing new varieties better adapted to American climatic conditions.		
(2) Caprification of the fig and study of the life history of figs and caprifigs (Mr. Swingle). The object is to investigate the process of caprification and to study in detail the life history of the figs used for drying purposes, and also of the caprifigs in which the insect is produced.....	(2) Caprification of the fig and study of the life history of figs and caprifigs..... 2,000.00	(2) Caprification of the fig and study of the life history of figs and caprifigs..... 2,000.00
1,500.00		
<i>Results.</i> —It has been possible as a result of this work to advise settlers and to prevent losses which would inevitably occur from planting fig orchards in regions where they could not succeed; and, on the other hand, to encourage growers in regions where the culture of figs is likely to prove profitable.		
(3) Establishment of pistache culture and study of the life history of the pistache nut and its wild relatives (Mr. Swingle). The object is to bring about the culture of the pistache on a commercial scale in the United States, and to work out the exact cultural requirements of this nut.....	(3) Establishment of pistache culture and study of the life history of the pistache nut and its wild relatives... 700.00	(3) Establishment of pistache culture and study of the life history of the pistache nut and its wild relatives... 700.00
600.00		
<i>Results.</i> —A number of scions of the best commercial varieties of flavoring pistaches have been secured from Sicily and Asia Minor, and these are under experimentation in the Southwest. It is believed that the pistache will prove valuable on unirrigated lands where other fruit and nut crops will not succeed.		

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
PLANT LIFE HISTORY INVESTIGATIONS—Continued. PROJECTS—continued.	PLANT LIFE HISTORY INVESTIGATIONS—Con. PROJECTS—continued.	PLANT LIFE HISTORY INVESTIGATIONS—Con. PROJECTS—continued.
(4) Breeding new citrus fruits and pineapples (Mr. Swingle, in cooperation with Dr. H. J. Webber, collaborator, formerly physiologist in charge of Plant Breeding Investigations). The object is the continuation of the work inaugurated by Doctor Webber and Mr. Swingle in the development by hybridization of hardy frost-proof oranges, new and improved types of citrus fruits, and improved pineapple varieties. It has been the aim to secure hardy oranges which may be grown in more northern regions than the present orange belt and which will be able to resist severe freezes; to obtain hybrids combining the loose skin of the tangerine with the quality and form of the ordinary orange; and to secure improved varieties of tangerines, oranges, pomelos, and other citrus fruits, as well as pineapples. \$2,300.00 <i>Results.</i> —A new group of hardy citrus fruits, called citranges, has been developed and distributed. These have proved to be very useful substitutes for lemons and can be grown as home fruits throughout the South, the warmer parts of Idaho and Nevada, and even in Oregon and Washington. Another new group of citrus fruits, called the tangelo, has been produced, as well as two new tangerines and two new limes. Five new pineapple varieties have been secured as a result of systematic experimentation, which are believed to have superior qualities. The pineapple work is about completed.	(4) Breeding new citrus fruits and pineapples. \$3,110.00	(4) Breeding new citrus fruits and pineapples. \$4,110.00
(5) Arboricultural investigations (S. C. Mason, arboriculturist). The object is the utilization of tree crops in dry-land regions, and to study the life history of fruit, nut, and forage trees likely to succeed in the drier parts of the Southwest. Among the crops now under trial are the pistache nut, almonds, apricots, figs, and olives. 5,500.00 <i>Results.</i> —Already, in connection with these investigations, there has been discovered a wild almond on the Pacific coast and a wild peach in Texas, both of great promise from a horticultural standpoint. The manuscript of a bulletin on dry-land olive culture in the United States has been prepared, confirming in a most striking manner the drought-resistant powers of the olive.	(5) Arboricultural investigations. 4,610.00	(5) Arboricultural investigations. 4,610.00
(6) Cooperative demonstrations on Indian reservations (Mr. Swingle). The object of this work is to test, in cooperation with the Indian Office, Department of the Interior, crops promising for culture on the Indian reservations in the Southwest, with a view to finding profitable crops for the Indians to grow for themselves and to familiarize them with the handling of crops likely to be grown by the whites nearby by utilizing Indian labor. 3,000.00 <i>Results.</i> —A cooperative testing and demonstration garden has been started at Sacaton, Ariz., on the Pima Indian Reservation and 55 acres of irrigated land are being prepared for this work. The Bureau of Plant Industry furnishing seeds, plants, etc., and directing the experiments, the Office of Indian Affairs, Department of the Interior, furnishing the land, irrigation water, and labor. Much importance is being given to the establishment of Egyptian-cotton culture, in cooperation with Mr. Thomas H. Kearney. A 20-acre field is growing at the cooperative testing and demonstration garden at Sacaton, and in the autumn of 1908 as the cotton ripens the Indians will be trained to pick it. Ultimately the Indians will probably grow cotton themselves, to be picked by the women and children, while the men hire out to the white settlers. To supply our present importation of Egyptian cotton 100,000 acres at least will have to be planted in the Southwest, and the labor question will be the determining factor in the success or failure of the industry.	(6) Cooperative demonstrations on Indian reservations. 3,959.08	(6) Cooperative demonstrations on Indian reservations. 5,959.08
(7) Clover and alfalfa investigations (C. J. Brand, physiologist). The object is to investigate the life history of clover and alfalfa with special reference to climatic, soil, and cultural requirements of the various varieties, and at the same time to determine whether change of seed is beneficial and, if so, whether it can be carried out to advantage in practice. 4,800.00 <i>Results.</i> —A new long-season alfalfa for the Southwest has been brought to light, which will grow at lower temperatures than any other known alfalfa. This form passes without injury through frosts which kill all ordinary alfalfas. A new type of red clover has also been discovered, which is superior to the ordinary varieties in cultivation. Each of these new varieties has been described in a publication, and their trial can be recommended with reasonable certainty of success.	(7) Clover and alfalfa investigations. 5,210.00	(7) Clover and alfalfa investigations. 6,210.00

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
PLANT LIFE HISTORY INVESTIGATIONS—Continued.	PLANT LIFE HISTORY INVESTIGATIONS—Con.	PLANT LIFE HISTORY INVESTIGATIONS—Con.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(8) Miscellaneous life history investigations (Mr. Swingle). These include an investigation of the application of electricity in plant culture, to determine by field tests whether electricity can be applied to advantage in truck farming; an investigation of the stimulation treatment of crops, to discover the causes of increased yields of plants sprayed with Bordeaux mixture and of cereals treated to prevent smut; a study of truffle culture and of the life history of the truffle fungus and truffle oaks, with a view to the establishment of truffle cultures on a commercial basis in the United States.....	(8) Miscellaneous life history investigations..... \$2,105.17	(8) Miscellaneous life history investigations..... \$2,105.17
\$2,071.45		
<i>Results.</i> —The department has been enabled to advise correspondents as to the real status of "electro culture" and to prevent the exploitation of fraudulent schemes and claims with regard to the use of electricity in farming. The work on stimulation treatment is under way in the laboratory and the greenhouse. The work on truffle culture is being conducted in cooperation with private growers in the Southwest.		
BIONOMIC INVESTIGATIONS OF TROPICAL AND SUBTROPICAL PLANTS.	BIONOMIC INVESTIGATIONS OF TROPICAL AND SUBTROPICAL PLANTS.	BIONOMIC INVESTIGATIONS OF TROPICAL AND SUBTROPICAL PLANTS.
(O. F. Cook, bionomist in charge.)	(O. F. Cook, bionomist in charge.)	(O. F. Cook, bionomist in charge.)
Salaries, statutory..... \$1,400.00	Salaries, statutory..... \$1,400.00	Salaries, statutory..... \$2,300.00
Salaries, lump fund..... 14,247.84	Salaries, lump fund..... 14,200.00	Salaries, lump fund..... 13,300.00
Stationery, furniture, supplies, etc..... 885.68	Stationery, furniture, supplies, etc..... 839.20	Stationery, furniture, supplies, etc..... 839.20
Miscellaneous expenses, freight, express, etc..... 50.00	Miscellaneous expenses, freight, express, etc..... 50.00	Miscellaneous expenses, freight, express, etc..... 50.00
Traveling and station and field expenses..... 3,790.63	Traveling and station and field expenses..... 3,800.00	Traveling and station and field expenses..... 3,800.00
Total..... 20,374.15	Total..... 20,289.20	Total..... 20,289.20
PROJECTS.	PROJECTS.	PROJECTS.
(1) Weevil resistant cotton investigations (Mr. Cook). This work includes the study of the weevil-resisting adaptations of cottons native in tropical America and the acclimatization of the most promising sorts in the United States, particularly in the Southwest, in order to secure varieties for this region which will be resistant to the boll weevil; also a study of the cultural factors of weevil resistance, and of the modifications of cultural methods necessitated by the presence of the boll weevil, to ascertain the methods of cultivation best adapted to resist the boll weevil.....	(1) Weevil resistant cotton investigations..... 10,314.20	(1) Weevil resistant cotton investigations..... 10,314.20
10,399.15		
<i>Results.</i> —Weevil-resisting varieties of cotton have been found which enable regular field cultures to be carried on in the presence of the boll weevil. These varieties differ much in their cultural qualities, as well as in their weevil-resisting characters, but are closely related to the upland cottons of the United States. They are very productive and resistant to drought and have large bolls and lint of good length and quality. They behave in a very abnormal manner when first planted in the United States, but are making good progress toward acclimatization. The effectiveness of some of the weevil-resisting characters was strikingly shown in Texas in the past summer. This study of acclimatization has brought to light the fact that change of conditions often disturbs the normal characters of cotton varieties. Even in transferring our upland varieties to different parts of the cotton belt, the results of selection may be lost, and many degenerate variations may appear, reducing both the yield and the quality of the staple. Local adjustment of varieties has been found to bring increases of from 10 to 20 per cent in the yield of the second planting over the same stock planted for the first time. These reactions to local conditions are worthy of thorough investigation to give us better knowledge of the values of varieties, which are not shown by ordinary methods of testing. Some of the Central American varieties have shown much larger growth under conditions of drought in southwestern Texas than any of our United States varieties, the structure of the leaves being better adapted to diminish the transpiration of water. Greater drought resistance will enable cotton cultivation to be carried on more successfully in the dry southwest where the boll weevil is much less injurious than in the humid regions farther east.		
(2) Corn Extension investigations (Mr. Cook). This work includes the study of the adaptive characters of the varieties of corn indigenous in Mexico, Central America, and South America, and of the effects of new and changed conditions on the varieties, and to acclimatize the promising varieties in the different regions where their natural characteristics fit them for the local conditions, and to learn the effects of change of seed. The chief object is to secure varieties adapted	(2) Corn extension investigations.. 5,300.00	(2) Corn extension investigations.. 5,300.00

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
BIONOMIC INVESTIGATIONS OF TROPICAL AND SUBTROPICAL PLANTS—Continued. PROJECTS—continued. <p>to our tropical territory and to the subtropical Gulf regions and the arid West, where corn is not grown or is a precarious crop.....</p> <p><i>Results.</i>—Many varieties of corn have been found in Central and South America with pronounced adaptations to conditions outside of the present range culture in the United States.</p> <p>(3) Study of the physiology of reproduction (Mr. Cook). The object of this work is to ascertain for the various crop plants which methods of breeding are most likely to produce valuable and lasting results, as well as the methods of propagation that will best maintain valuable characteristics without loss of vigor. The effects of methods of propagation upon the vitality of cultivated plants are also being studied....</p> <p><i>Results.</i>—Essential differences are being discovered between breeding processes hitherto confused. It has been found that methods of breeding effective for the improvement of some crops are actually injurious in others, or only of temporary value, since they lead to degeneration.</p> <p>(4) Production of rubber and rubber substitutes in the United States (Mr. Cook). This work is a completion of previous investigations, to test the possibilities of producing rubber and rubber substitutes in this country, and to demonstrate the possibility of securing useful gums or rubber substitutes from some of our native latex-yielding plants.</p> <p><i>Results.</i>—The climatic and cultural requirements of Central American rubber have been ascertained and the information published, enabling the public to avoid unsafe investments in foreign plantations. A number of new species of Central American rubber trees have been discovered which differ in their cultural values as well as in definite botanical characters. Superior methods of coagulating Central American rubber have been devised, greatly increasing the value of the product. On the other hand the prospects of Central American rubber culture are diminished by the failure of trees to restore the supply of rubber about the wounds of former tappings.</p> <p>(5) Bionomic studies of various tropical and subtropical plants (Mr. Cook). This work includes investigations as to the possibilities of producing such tropical crops as coffee, cacao, bananas, etc., in the United States proper or its tropical possessions; the study and acclimatization of desirable varieties of plants from tropical America, such as the firm-skinned avocados, early-bearing chayotes, special varieties of potatoes, beans, etc.; and various other bionomic investigations.....</p> <p><i>Results.</i>—Outlines have been made for a new system of coffee culture adapted to such regions as Porto Rico, which increases the yield and lessens the cost of production. Porto Rico is better situated for the production of coffee than many regions which now produce coffee profitably, and by better methods of cultivation its output could be greatly increased if commercial relations were favorable.</p> <p>The cacao varieties of Guatemala, Costa Rica, Mexico, and Jamaica have been studied to learn the factors of superiority in commercial quality and agricultural value. Improved methods of culture and pruning have been worked out for the advice of planters in Porto Rico, Hawaii, and the Philippines. Cacao has been found to thrive better in localities drier than those in which it is usually planted, permitting a wider utilization of this important crop in our insular possessions.</p> <p>The feasibility of commercial banana culture in Porto Rico has been ascertained. The development of a banana growing industry now depends upon transportation facilities, commercial relations, or tariff enactments.</p> <p>A series of dwarf species of palms native in Central America have been found better adapted to household cultivation than the East Indian species now imported in large quantities by way of Europe.</p> <p>Central American varieties of avocados with thick, firm skins have been obtained, able to endure handling and shipping better than the soft-skinned varieties now grown in Florida and Porto Rico. This highly nutritious tropical fruit is likely to become a popular favorite if it can reach our markets at lower prices and in sufficient quantities. This becomes feasible if loss in shipment can be avoided.</p>	BIONOMIC INVESTIGATIONS OF TROPICAL AND SUBTROPICAL PLANTS—Continued. PROJECTS—continued. <p>(3) Study of the physiology of reproduction.....</p> <p>(4) Production of rubber and rubber substitutes in the United States.....</p> <p>(5) Bionomic studies of various tropical and subtropical plants.....</p>	BIONOMIC INVESTIGATIONS OF TROPICAL AND SUBTROPICAL PLANTS—Continued. PROJECTS—continued. <p>(3) Study of the physiology of reproduction.....</p> <p>(4) Production of rubber and rubber substitutes in the United States.....</p> <p>(5) Bionomic studies of various tropical and subtropical plants.....</p>
<p>\$5,300.00</p> <p>1,200.00</p> <p>1,200.00</p> <p>2,275.00</p>	<p>\$1,200.00</p> <p>1,200.00</p> <p>2,275.00</p>	<p>\$1,200.00</p> <p>1,200.00</p> <p>2,275.00</p>
INVESTIGATIONS OF DRUG AND OTHER SPECIAL CROPS AND OF POISONOUS PLANTS. (Rodney H. True, physiologist in charge.) Salaries, statutory..... Salaries, lump fund..... Stationery, furniture, supplies, etc..... Miscellaneous expenses, freight, express, etc..... Traveling and station and field expenses..... Total	INVESTIGATIONS OF DRUG AND OTHER SPECIAL CROPS AND OF POISONOUS PLANTS. (Rodney H. True, physiologist in charge.) Salaries, statutory..... Salaries, lump fund..... Stationery, furniture, supplies, etc..... Miscellaneous expenses, freight, express, etc..... Traveling and station and field expenses..... Total	INVESTIGATIONS OF DRUG AND OTHER SPECIAL CROPS AND OF POISONOUS PLANTS. (Rodney H. True, physiologist in charge.) Salaries, statutory..... Salaries, lump fund..... Stationery, furniture, supplies, etc..... Miscellaneous expenses, freight, express, etc..... Traveling and station and field expenses..... Total
<p>\$5,092.67</p> <p>20,797.17</p> <p>7,226.60</p> <p>700.00</p> <p>6,028.24</p> <p>39,844.68</p>	<p>\$4,560.00</p> <p>23,892.00</p> <p>11,280.20</p> <p>850.00</p> <p>8,900.00</p> <p>49,482.20</p>	<p>\$4,260.00</p> <p>24,192.00</p> <p>11,280.20</p> <p>850.00</p> <p>8,900.00</p> <p>49,482.20</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
INVESTIGATIONS OF DRUG AND OTHER SPECIAL CROPS AND OF POISONOUS PLANTS—Continued.	INVESTIGATIONS OF DRUG AND OTHER SPECIAL CROPS AND OF POISONOUS PLANTS—Cont'd.	INVESTIGATIONS OF DRUG AND OTHER SPECIAL CROPS AND OF POISONOUS PLANTS—Cont'd.
PROJECTS.	PROJECTS.	PROJECTS.
(1) Administrative and supervisory work (Doctor True). This includes the direction and general supervision of all work on drug plants, American tea, poisonous plants, etc., the general office and laboratory work connected with the field investigations, and other supervisory features of the work..... a \$3,081.00 <i>Results.</i> —The results achieved under this project are reflected in the progress and results of all the other projects, described hereafter.	(1) Administrative and supervisory work..... a \$8,565.00	(1) Administrative and supervisory work..... \$8,565.00
<i>Drug and related crops.</i>	<i>Drug and related crops.</i>	<i>Drug and related crops.</i>
(2) Establishment of an American camphor industry (Doctor True). This work consists of field tests of the grown camphor tree with reference to camphor distribution, propagation and cultivation tests, and the working out of the best methods of growing camphor trees and of utilizing the product. Tests have shown that camphor obtained from American grown trees is identical with that imported from the Orient. It is believed that camphor trees will flourish over a large part of the area from which frost has driven the orange, and that they will produce camphor in commercial quantities..... 3,150.00 <i>Results.</i> —It is believed that the camphor industry has now been established on a firm basis. A large acreage is being planted to camphor in Florida, and interest in the growing of this crop is being shown elsewhere. From 3,000 to 4,000 acres of the trees are being prepared for planting in Florida alone. The work of the past year has consisted largely in starting young stock from parent trees carefully selected for camphor content. To get this result samples of material were carefully distilled from well-shaped, healthy seed-bearing trees having a good rate of growth. Where the gum content was found to be high, seeds of these trees were obtained for planting. The outlook for the future of the camphor industry in Florida seems to make a practical appeal to investors, a second large plantation having been established during the year.	(2) Establishment of an American camphor industry..... 2,406.67	(2) Establishment of an American camphor industry..... 2,406.67
(3) Production of morphine and other alkaloids from poppy capsules (Doctor True). The objects of this work are the utilization of the walls of the poppy capsules as a commercial source of morphine, codeine, and other alkaloids, and the working out of methods of propagation, cultivation, and handling in relation to the extraction of alkaloids from plants.. 2,000.00 <i>Results.</i> —It has been found practicable to isolate opium alkaloids from the capsule waste of the poppy plant remaining after the seeds have been removed. After a number of discouraging attempts to get sufficient material for a test of the practicability of obtaining poppy alkaloids directly from the plant capsules, success has resulted from a planting in eastern Washington (State). A yield of about 900 pounds per acre of very good seed and about 700 pounds of capsule walls was obtained. The seed was sold in open market at the top prices, showing a good net profit. The extraction and separation of the alkaloids from the capsule walls will be completed as soon as possible.	(3) Production of morphine and other alkaloids from poppy capsules..... 1,258.33	(3) Production of morphine and other alkaloids from poppy capsules..... 500.00
(4) Compilation of information on drug plants for publication (Alice Henkel, assistant). This work consists of the collection of data concerning drug plants which are the subject of numerous inquiries, and the preparation of publications for use in answering requests and disseminating useful information regarding drug plants..... 1,791.67 <i>Results.</i> —A number of publications which have found a wide field of usefulness have resulted from this work. These publications are meeting a great and continued demand for information regarding the cultivation of drug crops.	(4) Compilation of information on drug plants for publication..... 1,850.00	(4) Compilation of information on drug plants for publication..... 1,850.00
(5) Arlington (Va.) drug plant testing garden (G. F. Klugh, assistant). The objects of this work are to ascertain the best methods of handling foreign and domestic drug plants, both wild and cultivated, and the making of careful observations on methods of propagation, culture, curing, etc. Tests to show whether the amount of active principle present in the plants can be increased by fertilization are under way. In order to permit the necessary extraction and distillation of the products grown experimentally, a small field laboratory is maintained in connection with the drug garden..... 2,520.00 <i>Results.</i> —It has been shown that many valuable drug crops can be produced in this country. The United States sends abroad each year from 10 to 15 million dollars for the purchase of plant drugs, many of which can be grown at home. Methods of cultivating and growing many important drugs now imported have been worked out, and important native drug-producing plants threatened with extermination have been gotten under cultivation.	(5) Arlington (Va.) drug plant testing garden..... 3,860.00	(5) Arlington (Va.) drug plant testing garden..... 3,860.00

a The difference between administrative expenses in 1908 and 1909 is explained by the fact that beginning with the latter fiscal year various expenditures which had previously been charged to the various scientific projects were embraced under the administrative project.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
INVESTIGATIONS OF DRUG AND OTHER SPECIAL CROPS AND OF POISONOUS PLANTS—Continued.	INVESTIGATIONS OF DRUG AND OTHER SPECIAL CROPS AND OF POISONOUS PLANTS—Cont'd.	INVESTIGATIONS OF DRUG AND OTHER SPECIAL CROPS AND OF POISONOUS PLANTS—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Drug and related crops—Continued.	Drug and related crops—Continued.	Drug and related crops—Continued.
(6) South Carolina drug-plant testing gardens (T. B. Young, assistant). These gardens are located at Ebenezer and at Florence. Their work is similar to that at Arlington, Va., just described, and in addition demonstrations are made of the culture of the most promising drug crops. \$2,310.00	(6) South Carolina drug-plant testing gardens..... \$1,840.00	(6) South Carolina drug-plant testing gardens..... \$2,598.33
Results.—The growing on a commercial scale of several drug plants has been accomplished and several tons of important sorts have been sold, demonstrating the commercial possibilities of South Carolina in drug production. During the past season, although unseasonable frosts in the spring and fall did much injury, about 10,000 pounds of paprika peppers and American wormseed were grown, cured, and sold in the open market at good profits.		
(7) Physiological testing of plant drugs (A. C. Crawford, pharmacologist). This work consists of laboratory tests of American-grown drug-plant products, to determine the amount of active principle present therein. The object is to ascertain the value of such drugs as digitalis, Cannabis indica, etc., by animal tests. Known doses are administered to animals to ascertain by the action on them the amount of active principle present. 675.00	(7) Physiological testing of plant drugs (Carl L. Alsberg, expert in chemical biology)... 733.34	(7) Physiological testing of plant drugs..... 733.34
Results.—By this means it has been shown that American-grown Cannabis from Washington or Texas is as effective as the India-grown drug. Similar work on other drug plants is under way and gives promise of valuable results.		
(8) Perfumery-plant investigations (Frank Rabak, expert). This work consists of a study of American-grown plants yielding volatile oils, with reference to their utilization in the manufacture of perfumery, soaps, etc. These materials are now in large part imported. Both wild and imported plants are under test, and laboratory distillations to isolate the fragrant principles are made. 350.00	(8) Perfumery-plant investigations..... 1,403.53	(8) Perfumery-plant investigations..... 1,403.53
Results.—In this work, which was only undertaken on a small scale in 1908, some fine products have already been produced which should find a ready market demand if produced commercially, such as the oil of <i>Mentha citrata</i> , <i>Monarda fistulosa</i> and <i>punctata</i> , <i>Artemisia frigida</i> , etc.		
(9) American hop investigations (W. W. Stockberger, expert). This work is a study of the relation between the quality of hops and methods of growing, curing, and handling the product, and the working out of the conditions most favorable to the development of desirable qualities and constituents. The object is to ascertain to what extent the good and bad qualities of American hops are due to methods of growing, curing, etc. 3,286.15	(9) American hop investigations.. 4,533.33	(9) American hop investigations.. 4,533.33
Results.—A study of hop drying has been continued in California and the effect on the principal constituents resulting from the different methods employed has been under investigation. As a special problem, the source of small amounts of arsenic occasionally found in both foreign and domestic hops was sought. It was made clear that in the case of our domestic hops little arsenic is absorbed by the plant, even though the soil is watered frequently with arsenic solutions of considerable concentration. The source was found in the impure sulphurs used in sulphuring the hops. This conclusion is one of great importance to the hop industry and seems to make the cure of this long-standing trouble easily possible. It may also have a very important bearing on the sulphuring of fruits and other products used in foods or drinks.		
(10) Study of methods and means of making and using industrial alcohol on the farm (Doctor True). This work includes a study of the problem in European countries; laboratory and field tests of the fermentation and distillation of potatoes, corn, sorghum, ensilage, sugar-beet pulp, and other cheap crude sources of fermentable material; tests of the most suitable types of apparatus for carrying on these processes; and devising apparatus for utilizing industrial alcohol on the farm. The entire work deals with the situation from the standpoint of plant industry. 3,000.00	(10) Study of methods and means of making and using industrial alcohol on the farm.... 5,000.00	(10) Study of methods and means of making and using industrial alcohol on the farm.... 5,000.00
Results.—A thorough investigation of European conditions of industrial alcohol production has been made. The situation in Germany was found to give most valuable suggestions. These observations have furnished a basis for planning future work. One of the first tasks involved in a conservative investigation of this subject seems to be found in careful determinations of the alcohol value of such waste and cheap farm products as seem to promise favorable raw materials for the manufacture of alcohol.		
(11) Lemon investigations (Doctor True). This work includes a study of the conditions under which lemons are grown and prepared for market, with special reference to methods of curing, in order to ascertain the cause of the poor keeping quality of the American product and to remove it if possible; the	(11) Lemon investigations..... 2,637.50	(11) Lemon investigations..... 2,637.50

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
INVESTIGATIONS OF DRUG AND OTHER SPECIAL CROPS AND OF POISONOUS PLANTS—Continued.	INVESTIGATIONS OF DRUG AND OTHER SPECIAL CROPS AND OF POISONOUS PLANTS—Cont'd.	INVESTIGATIONS OF DRUG AND OTHER SPECIAL CROPS AND OF POISONOUS PLANTS—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Drug and related crops—Continued.</i>	<i>Drug and related crops—Continued.</i>	<i>Drug and related crops—Continued.</i>
working out of methods of utilizing lemon waste products, such as the formation of citric acid from distilled fruits; and incidental work in the improvement of lemons by selection, to ascertain whether the yield and keeping qualities of lemons may be improved in this manner.....		
\$2,650.00		
<i>Results.</i> —During the past season fruit handled in various ways has been shipped to Washington and held for keeping tests. Tree-ripened, tent-cured, and sweated fruit have had careful laboratory study and important indications have been obtained. It seems probable that the cause of the deficient keeping quality of the American fruit is due in part to poor methods of handling, but to a much greater degree to some fundamental weakness, the source of which is not yet revealed. This problem is being further studied both in the lemon houses and in the field.		
<i>American tea.</i>	<i>American tea.</i>	<i>American tea.</i>
(12) South Carolina tea investigations (Doctor True, in cooperation with Dr. Charles U. Shepard, Summerville, S. C.). This work includes experiments in the growing and manufacture of tea on a commercial scale, the devising of machinery, and the testing of improved methods of producing tea in the United States. Tests of different varieties of tea plants and of factory methods and machinery are features of the work. The objects are to obtain knowledge of the most profitable tea varieties for the United States and of the methods of planting, growing, and handling tea on a commercial scale.....	(12) South Carolina tea investigations.....	(12) South Carolina tea investigations.....
1,125.85	\$1,200.00	\$1,200.00
<i>Results.</i> —The tea situation in South Carolina is very promising. The production of tea is satisfactory and an increased demand for American tea absorbs the product. The cost of production is being reduced and the quality of the product is steadily improving while the yield does not diminish in quantity.		
The tea work up to date has demonstrated the following important facts: That tea will grow well in the right places in this country and produce an abundant yield, and that this yield of leaf can be made into excellent tea. The agricultural and manufacturing aspects of the tea industry have been in a very great measure worked out. The problem of marketing is at present the chief unsettled point. It is believed that by reducing the cost of production through the use of labor-saving machinery, much can be done to encourage the American tea industry.		
(13) Texas tea investigations (Doctor True, in cooperation with A. P. Borden). During the past year the tea gardens in Texas consisted of about 40 acres at Pierce. The work included the propagation, planting, and pruning of tea plants on a commercial scale and the preparation of the product for market.....	(13) Devising of a tea pruner and picker (G. F. Mitchell, assistant). The objects of this work are to devise practical machinery for pruning and picking tea, and thereby to reduce materially the cost of production.....	(13) Devising of a tea pruner and picker.....
3,003.33	2,500.00	2,500.00
<i>Results.</i> —Unfavorable conditions developed during the past year in the Texas tea work, and the work in that State has been discontinued. Occasional floods inundate the country, and the tea fields have suffered so severely that it has become evident that the situation is not favorable for tea culture. The great difficulty in getting labor, a trouble which has become increasingly acute during the last few years, has proved a final obstacle.	<i>Results.</i> —This work has been only recently begun, and it is therefore too early to state definite results. The project already gives promise, however, of being the means of solving one of the important problems connected with the tea industry in the United States.	
(14) Breeding and other miscellaneous work on tea (Doctor True). This project includes breeding work to improve the quality and quantity of the tea leaf; a study of the changes due to the fermentation of tea in relation to its quality, and of the relation of constituents to fragrance and aromatic properties; and laboratory studies on finished teas and at the factory on material in different stages of manufacture.....	(14) Breeding and other miscellaneous work on tea.....	(14) Breeding and other miscellaneous work on tea.....
210.00	900.00	900.00
<i>Results.</i> —Considerable progress has been made in the experimental work in tea improvement. In the laboratory it has been shown that tea fermentation is due to the action of oxidizing enzymes on other constituents of the leaf, and that the tea aroma is not due to volatile oils, as was generally supposed, but to substances generated in the tea during factory processes.		
<i>Poisonous plants.</i>	<i>Poisonous plants.</i>	<i>Poisonous plants.</i>
(15) Field investigations of loco poisoning (C. Dwight Marsh, expert). This work includes feeding experiments on ranges and in corrals on horses, cattle, and sheep to determine definitely the cause of loco poisoning of animals, to connect different manifestations of the loco disease with the plants occasioning them,	(15) Field investigations of loco poisoning.....	(15) Field investigations of loco poisoning.....
	4,266.67	4,266.67

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1232); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
INVESTIGATIONS OF DRUG AND OTHER SPECIAL CROPS AND OF POISONOUS PLANTS—Continued.	INVESTIGATIONS OF DRUG AND OTHER SPECIAL CROPS AND OF POISONOUS PLANTS—Cont'd.	INVESTIGATIONS OF DRUG AND OTHER SPECIAL CROPS AND OF POISONOUS PLANTS—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Poisonous plants—Continued.	Poisonous plants—Continued.	Poisonous plants—Continued.
and to devise means for reducing the losses now sustained by the stock-grazing interests through loco poisoning. Autopsies on locoed animals are made in connection with the work.....		
\$4,500.00		
Results.—The field work has developed clearly the cause and symptoms of the loco-weed disease, and methods of treating horses and cattle when conditions permit individual handling were worked out. Nearly all locoed animals, when taken up before the final stages of the disease, can be cured. It has been shown that the most dangerous of the so-called loco weeds of eastern Colorado is the rattle-weed, <i>Aragallus lamberti</i> . Less destructive but more poisonous is the "woolly loco weed," <i>Astragalus mollissimus</i> . Methods of treatment have been devised by which most locoed animals can be restored to usefulness.		
(16) Laboratory investigations of loco poisoning (A. C. Crawford, pharmacologist). This work consists of a technical laboratory study of the loco weeds and of methods of treating locoed animals, to supplement and to aid in the field investigations, just described..	(16) Laboratory investigations of loco poisoning (Carl L. Alsberg, expert in chemical biology).....	(16) Laboratory investigations of loco poisoning.....
2,500.00	\$1,908.33	\$1,908.33
Results.—An examination of various species of loco weeds in the laboratory has shown them to contain the poisonous element <i>barium</i> which the plants take up from the soil. The connection between the loco weeds and the disease has been demonstrated, and a diagnosis of the disease has been made, including the physiological and pathological symptoms.		
(17) Investigations of larkspur poisoning (Doctors Marsh and Crawford). The object of this work is to ascertain by laboratory and field study the relation of the poisonous activity of larkspurs to time of year, stage of development, etc., and to learn the best methods of meeting the trouble. Next to the various loco weeds, the larkspurs are probably the plants most injurious to the grazing interests of the West. In the mountains the damage wrought is very great...	(17) Investigations of larkspur poisoning (Doctors Marsh Alsberg).....	(17) Investigations of larkspur poisoning.....
600.00	708.33	1,203.92
Results.—Preliminary field surveys have made it apparent that the larkspur situation is so bad as to demand a more serious consideration than it has yet received. Accordingly, plans have been made for a material extension of this investigation. A bulletin on "The Larkspurs as Poisonous Plants," has been issued, dealing with laboratory tests to determine the stage of growth having the greatest toxicity.		
(18) Investigations of various stock-poisoning plants (Doctors Marsh and Crawford). This work includes a study of the physiological properties of mistletoe with reference to its poisonous action as well as to its possible value as a remedy in stock poisoning; an investigation of the poisonous action of <i>Zygadenus</i> , or death camas, and the best method of overcoming it; an investigation of the relation of plants to the bighead disease in sheep; and studies of poison ivy, lupines, and various other plants causing disease or death.....	(18) Investigations of various stock-poisoning plants (Doctors Marsh and Alsberg)...	(18) Investigations of various stock-poisoning plants.....
3,091.68	1,911.17	1,417.98
Results.—Many of the results of these investigations have been published in bulletin form. The field investigations have resulted in establishing many important facts in connection with various plant troubles, and in the laboratory the poisonous principles of many plants have been worked out.		
(19) Cooperative investigations of stock poisoning on the national forests (Doctor Marsh, cooperating with the Forest Service, through Ivar Tidestrom, assistant). (During 1908 the entire expenses of this work were delayed by the Forest Service.)	(19) Cooperative investigations of stock poisoning on the national forests (Doctor Marsh, cooperating with the Forest Service, through Ivar Tidestrom, assistant). This work consists of studies on the national forests and adjacent areas in the West where great losses of stock due to poisoning occur. The objects are to ascertain what plants are causing the great losses in these regions, and to give suggestions as to the treatment of injured animals. Laboratory studies supplement this work.....	(19) Cooperative investigations of stock poisoning on the national forests (Doctor Marsh, cooperating with the Forest Service, through Ivar Tidestrom, assistant).....
	2,000.00	2,000.00
	Results.—Investigations have made of the conditions existing in such of the forests as have been the subject of complaint, with special reference to the distribution of the supposed poisonous plants, with the expectation that the identification and location of the injurious plants may be followed by the fencing in of dangerous areas, the eradication of the weeds, or methods of protecting the stock and reducing losses.	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
CROP TECHNOLOGY, COTTON STANDARDIZATION, AND FIBER INVESTIGATIONS.	CROP TECHNOLOGY, COTTON STANDARDIZATION, AND FIBER INVESTIGATIONS.	CROP TECHNOLOGY, COTTON STANDARDIZATION, AND FIBER INVESTIGATIONS.
(N. A. Cobb, crop technologist in charge.)	(N. A. Cobb, crop technologist in charge.)	(N. A. Cobb, crop technologist in charge.)
Salaries, statutory.....\$1,000.00	Salaries, statutory.....\$1,000.00	Salaries, statutory.....\$1,000.00
Salaries, lump fund.....8,730.49	Salaries, lump fund.....12,000.00	Salaries, lump fund.....14,000.00
Stationery, furniture, supplies, etc.....3,500.00	Stationery, furniture, supplies, etc.....4,500.00	Stationery, furniture, supplies, etc.....5,500.00
Miscellaneous expenses, freight, express, etc.....317.75	Miscellaneous expenses, freight, express, etc.....530.00	Miscellaneous expenses, freight, express, etc.....530.00
Traveling and station and field expenses.....1,270.80	Traveling and station and field expenses.....3,500.00	Traveling and station and field expenses.....5,500.00
Total.....14,819.04	Total.....21,530.00	Total.....26,530.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) Crop technology investigations (Doctor Cobb). This work relates especially to the development and improvement of apparatus and machinery used in investigation and in practical agricultural work, such as spraying apparatus, seed-cleaning machinery, etc. 6,425.72 Results.—Considerable progress has been made especially in the simplification and improvement of apparatus for both field and laboratory work. A machine for shelling the pistache and various other improved types of agricultural apparatus are in course of development.	(1) Crop technology investigations 7,380.00	(1) Crop technology investigations 7,380.00
(2) Cotton standardization investigations (R. L. Bennett, special agent). This work consists of a study of methods of preparing, ginning, and marketing cotton. The objects are the development of improved methods of handling cotton, with a view to lessening damage and cost, and thereby increasing the profit to the farmer; also to standardize the commercial grades of cotton, with a view to securing uniformity in grading. 1,783.32 Results.—The preliminary work of the past season has resulted in the securing of definite information which will greatly aid in the prosecution of this important work, provision for which was specifically made in the last agricultural appropriation act. A bulletin on Improved Methods of Handling and Baling Cotton has been prepared.	(2) Cotton standardization investigations.....7,500.00	(2) Cotton standardization investigations.....12,500.00
(3) Fiber investigations (L. H. Dewey, botanist). This work covers all fiber crops, such as hemp, flax, ramie, sisal, etc. The objects are the introduction of fiber growing industries into new regions, and to work out improved methods of handling fiber crops.....6,610.00 Results.—The establishment of a hemp industry in Pennsylvania is resulting from demonstrations of the practicability of growing hemp profitably in that State. Demonstrations of the production of ittle fiber in western Texas have been made, and a study of the possibilities of ramie culture in California has led to the inauguration of definite work on that crop.	(3) Fiber investigations.....6,650.00	(3) Fiber investigations.....6,650.00
GRAIN STANDARDIZATION.	GRAIN STANDARDIZATION.	GRAIN STANDARDIZATION.
(John D. Shanahan, crop technologist in charge.)	(John D. Shanahan, crop technologist in charge.)	(John D. Shanahan, crop technologist in charge.)
Salaries, lump fund.....\$24,213.59	Salaries, statutory.....\$1,200.00	Salaries, statutory.....\$2,560.00
Stationery, furniture, supplies, etc.....8,165.83	Salaries, lump fund.....33,610.00	Salaries, lump fund.....32,250.00
Miscellaneous expenses, freight, express, etc.....122.31	Stationery, furniture, supplies, etc.....7,435.00	Stationery, furniture, supplies, etc.....7,435.00
Rent.....1,948.53	Miscellaneous expenses, freight, express, etc.....135.00	Miscellaneous expenses, freight, express, etc.....135.00
Traveling and station and field expenses.....4,689.75	Rent.....3,920.00	Rent.....3,920.00
Total.....39,140.01	Traveling and station and field expenses.....8,700.00	Traveling and station and field expenses.....8,700.00
Outstanding liabilities, September 30, 1908.....771.27	Total.....55,000.00	Total.....55,000.00
Total expenditures and liabilities.....39,911.28	PROJECTS.	PROJECTS.
PROJECTS.	(1) Administrative and supervisory work.....9,750.00	(1) Administrative and supervisory work.....9,750.00
(1) Administrative and supervisory work (Mr. Shanahan, assisted by J. W. T. Duvel). This work includes the direction and supervision of all work in grain standardization, including the laboratories maintained at the principal grain centers in the United States, the investigations of the interstate and ocean transportation of grain, and the other features of the work.....9,450.49 Results.—The results under this project are reflected in the progress and results under all the other projects, described hereafter.	(2) Laboratory investigations in grain standardization, Washington, D. C.....7,700.00	(2) Laboratory investigations in grain standardization, Washington, D. C.....7,700.00
(2) Laboratory investigations in grain standardization, Washington, D. C. (J. W. T. Duvel, assistant in charge of laboratory methods). This work includes general investigations and research bearing on the systems of grain inspection, grading, storing, etc., with the object of improving these methods, of ascertaining the cause of deterioration of grain in storage and transit, and of effecting an equitable and scientific method of grading grain, and of collecting such information and data as will eventually enable the Department of Agriculture to establish United States standards for the commercial grades of grain... 7,475.00 Results.—A special apparatus for determining the moisture content of grain has been devised which makes it possible to determine in approximately twenty minutes the moisture content of six samples for each appa-		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
GRAIN STANDARDIZATION—Continued.	GRAIN STANDARDIZATION—Continued.	GRAIN STANDARDIZATION—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>ratus, whereas formerly it required from twenty-four to forty-eight hours to obtain accurately these determinations. This method is now widely used for determining the moisture content of corn, and has been further developed so that it is applicable to all grains. It bids fair to revolutionize grain-grading methods in this respect.</p> <p>(3) Trans-Atlantic grain transportation investigations (E. G. Boerner, assistant. Headquarters during the shipping season, London, England). This work consists of the examination of cargoes, and samples taken from such cargoes, of American export grain shipped from various points in the United States upon arrival at European ports, including the principal grain-receiving ports of Great Britain, Ireland, and continental Europe, and has for its object the securing of definite information regarding the condition on arrival of American export grain and to determine the causes of deterioration of such grain during ocean transit, with a view to improving conditions and obtaining information which will aid in the work of grain standardization. . . . \$1,888.63</p> <p><i>Results.</i>—The work of the past year was so planned as to be in full operation by the time the early shipments of American corn were received by European buyers. Nearly all of the more important European grain markets were visited and samples secured of grain from incoming cargoes for the purpose of determining the quality of grain exported from the United States and other grain-exporting countries, as well as to learn its condition at the time of discharge at European ports. These investigations have shown that much of the corn from the United States arrived in Europe in a badly damaged condition, especially that contained in the bunker hold and over the shaft tunnel. The extremely high price of corn in the United States during the spring of 1908 also afforded an excellent opportunity for the study of corn received from South American shippers, European dealers being able to secure South American corn at much less cost. All of the information secured in this work is being put to practical use in the grain standardization work in the United States.</p> <p>(4) Interstate grain transportation investigations (J. W. T. Duvel, assistant, and L. M. Jeffers). The object of these investigations is to ascertain the changes which take place in grain during transit in railroad cars and lake steamers. The factors of condition and quality, including the moisture and temperature of the grain, together with the relative humidity and temperature of the air at the time of loading and also at the time of discharge at destination. . . . 1,624.63</p> <p><i>Results.</i>—This work was inaugurated during the latter part of the fiscal year 1908. Careful determinations of the various factors influencing the carrying quality of grain were made, and while most of the grain was in good condition for shipment during the spring season, one car of corn examined at destination contained 22.9 per cent moisture and showed a temperature of 125° F. The work is being vigorously prosecuted, as it has an important bearing upon the general problem of grain standardization.</p> <p>(5) Grain standardization laboratory, Baltimore, Md. (C. A. Neal, assistant). The work in all of the grain standardization laboratories consists principally in making definite determinations of the moisture content, the different kinds and degrees of damage, the factors of color, the kinds and amount of impurities, the weight per bushel, the weight per 1,000 kernels, etc., of samples of grain either obtained personally by officers of the Bureau of Plant Industry or submitted for examination by grain merchants or chief inspectors of local grain inspection departments. Baltimore is a semisouthern export grain market through which large quantities of corn are annually exported. . . . 3,247.87</p> <p><i>Results.</i>—In all places where laboratories have been established the local exchanges have entered into cordial cooperation with the Department of Agriculture, and it is believed that much good has been accomplished in bringing about the more general feeling that work of this character is practical and much to be desired by inspectors, shippers, receivers, and consumers of grain. A number of cases have been brought to the attention of the department where the reports of the laboratories have determined the action taken in appeals, and have otherwise served in the satisfactory adjustment of disputes and claims.</p> <p>(6) Grain standardization laboratory, New Orleans, La. (E. C. Richey, assistant). (See preceding project, Baltimore laboratory, for general outline of work.) New Orleans is an extreme southern or gulf port export grain market, through which large quantities of northern-grown corn are annually exported, thus affording excellent opportunity for studying the effects of extreme climatic changes upon grain. . . . 2,800.73</p>	<p>(3) Trans-Atlantic grain transportation investigations. . . . \$3,150.00</p> <p>(4) Interstate grain transportation investigations. . . . 2,750.00</p> <p>(5) Grain standardization laboratory, Baltimore, Md. (Laurel Duval, assistant). . . . 3,750.00</p> <p>(6) Grain standardization laboratory, New Orleans, La. . . . 3,750.00</p>	<p>(3) Trans-Atlantic grain transportation investigations. . . . \$3,150.00</p> <p>(4) Interstate grain transportation investigations. . . . 2,750.00</p> <p>(5) Grain standardization laboratory, Baltimore, Md. . . . 3,750.00</p> <p>(6) Grain standardization laboratory, New Orleans, La. . . . 3,750.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
GRAIN STANDARDIZATION—Continued.	GRAIN STANDARDIZATION—Continued.	GRAIN STANDARDIZATION—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(7) Grain standardization laboratory, New York, N. Y. (C. E. Leighty, assistant).....	(7) Grain standardization laboratory, New York, N. Y.	(7) Grain standardization laboratory, New York, N. Y.
\$2,506.12	\$4,650.00	\$4,650.00
(8) Grain standardization laboratory, St. Louis, Mo. (W. P. Carroll, assistant).....	(8) Grain standardization laboratory, St. Louis, Mo. (E. L. Morris, assistant).....	(8) Grain standardization laboratory, St. Louis, Mo.
4,324.33	4,050.00	4,050.00
(9) Grain standardization laboratory, Minneapolis, Minn. (L. A. Fitz, assistant).....	(9) Grain standardization laboratory, Minneapolis, Minn. (A. M. Sattre, assistant)....	(9) Grain standardization laboratory, Minneapolis, Minn.
3,294.13	3,300.00	3,300.00
(10) Grain standardization laboratory, Duluth, Minn. (F. J. Ryder, assistant).....	(10) Grain standardization laboratory, Duluth, Minn.	(10) Grain standardization laboratory, Duluth, Minn.
3,299.30	3,800.00	3,800.00
NOTE.—The work of all of the above mentioned laboratories and the reasons for their establishment are essentially the same, each laboratory having been located at some point which is representative of a certain class of conditions in the grain trade of the United States. The laboratories were opened at such points as would embody the widest range of conditions and where the investigations carried on would furnish data covering the greatest number of classes and varieties of grain. As the work progresses, the routine processes in the laboratories are being much reduced and more time is given to the investigation of special problems peculiar to the individual markets.		
	(11) Grain standardization laboratory, Chicago, Ill. (W. P. Carroll, assistant). This laboratory was opened early in the fiscal year 1909, and its work is essentially similar to that of the other laboratories previously established. Chicago is the largest primary grain market in the world, affording especially good facilities for studying questions in connection with the grain business generally. The work at Chicago has the hearty cooperation of the Chicago Board of Trade, who urgently requested its inauguration....	(11) Grain standardization laboratory, Chicago, Ill.
	5,750.00	5,750.00
	(12) Wheat milling and baking tests (L. A. Fitz, assistant). This work is conducted at the North Dakota Agricultural Experiment Station, through a cooperative arrangement with that station. The object is to determine the relative flour and bread values of the different classes and varieties of wheat grown in the United States, in so far as these qualities relate to their commercial grades. This information will greatly aid in fixing just, uniform, and intelligent grades for wheats. The North Dakota station provides the laboratory facilities for this work.	(12) Wheat milling and baking tests.
	2,600.00	2,600.00
SEED LABORATORY.	SEED LABORATORY.	SEED LABORATORY.
(Edgar Brown, botanist in charge.)	(Edgar Brown, botanist in charge.)	(Edgar Brown, botanist in charge.)
Salaries, statutory.....	Salaries, statutory.....	Salaries, statutory.....
\$3,250.00	\$3,640.00	\$3,640.00
Salaries, lump fund.....	Salaries, lump fund.....	Salaries, lump fund.....
12,939.56	18,000.00	21,000.00
Stationery, furniture, supplies, etc.....	Stationery, furniture, supplies, etc.....	Stationery, furniture, supplies, etc.....
2,200.00	2,000.00	3,000.00
Miscellaneous expenses, freight, express, etc.....	Miscellaneous expenses, freight, express, etc.....	Miscellaneous expenses, freight, express, etc.....
283.61	300.00	300.00
Traveling and station and field expenses.....	Traveling and station and field expenses.....	Traveling and station and field expenses.....
2,093.44	1,273.17	2,273.17
Total.....	Total.....	Total.....
20,766.61	25,213.17	30,213.17
PROJECTS.	PROJECTS.	PROJECTS.
(1) General supervisory and office work (Mr. Brown). This includes the planning and direction of the seed work both in the laboratory at Washington and in the field; the conduct of correspondence; and other details connected with the seed investigations.....	(1) General supervisory and office work.....	(1) General supervisory and office work.....
4,566.61	4,579.42	4,579.42
Results.—The results under this project are reflected in the progress noted under all the other projects, described in the following paragraphs.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
SEED LABORATORY—Continued.	SEED LABORATORY—Continued.	SEED LABORATORY—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(2) Seed testing, Washington, D. C. (Mr. Brown, assisted by W. L. Goss). This work includes the making of tests of seeds as to their germination and mechanical purity; the perfecting of seed-testing apparatus; and propaganda work with a view to popularizing seed testing. All of this work is carried on in accordance with the law authorizing the Secretary of Agriculture to test and report upon the quality of commercial seeds.....	(2) Seed testing, Washington, D. C.....	(2) Seed testing, Washington, D. C.....
\$5,500.00	\$6,181.17	\$8,251.17
<i>Results.</i> —Over 4,000 more samples of seed were received than in the year preceding the one just closed, the total number during the fiscal year 1908 being 24,715. The practical interest in seed testing and pure seed work is shown by the attention given this subject at the agricultural experiment stations and by seedsmen, as well as by farmers.		
(3) Adulterated seed investigations (Mr. Brown). This work is closely related to that just described, and has particular reference to the detection of adulteration in commercial lots of grass and clover seed. The work consists of analyses of commercial samples of these seeds, and the publication of the results of these tests, with the names of the dealers by whom the seeds were offered for sale. The object is to control and lessen the trade in adulterated seeds.....	(3) Adulterated seed investigations.....	(3) Adulterated seed investigations.....
5,000.00	5,532.58	5,532.58
<i>Results.</i> —The sale of adulterated seeds has materially decreased since this work was undertaken. Reports of the results of the work have been published from time to time as circulars of the office of the Secretary.		
(4) Pure seed investigations (F. H. Hillman, assistant botanist). The object of this work is to study impurities of seeds received at the laboratories, and to study the distinguishing characters of closely allied economic seeds, in order to be able to disseminate information as to the identity of various classes of commercial seeds.....	(4) Pure seed investigations.....	(4) Pure seed investigations.....
3,500.00	4,005.00	4,005.00
<i>Results.</i> —Authentic sets of 500 kinds of economic plants have been distributed; sets of 100 kinds of weed seeds have been prepared and distributed; and sets of 100 kinds of economic plants for use in schools have also been prepared and distributed. An improvement in the quality of commercial seeds has resulted from this work.		
(5) Seed-vitality investigations (Mr. Brown). This work consists of a study of methods of harvesting, curing, and storing various kinds of economic seeds, with a view to determining the conditions affecting their vitality. Improved methods of handling such seeds are being worked out, particularly with reference to the care of seed corn.....	(5) Seed-vitality investigations...	(5) Seed-vitality investigations...
1,000.00	1,150.00	1,150.00
<i>Results.</i> —About 5,000 packets of vegetable seeds, as sold by grocers, have been collected and are now being tested for germination. Germination tests have also been made of about 2,500 samples each of cowpeas and corn. The germination of the samples of corn, which were submitted by farmers, was found to be of a high average quality and the germination of cowpea seed was very much better than the samples tested during the preceding year.		
(6) Cooperative seed-testing laboratory, Lincoln, Nebr. (Mr. Brown, in cooperation with the Nebraska Experiment Station). This laboratory was started in January, 1908. Its object is to test samples of seed for farmers and seedsmen in the State of Nebraska and adjacent territory, making it possible to save the delay in sending samples to Washington.....	(6) Cooperative seed-testing laboratory, Lincoln, Nebr.....	(6) Cooperative seed-testing laboratory, Lincoln, Nebr.....
1,200.00	1,825.00	2,075.00
<i>Results.</i> —This laboratory has already been of great aid to both seedsmen and farmers, as is shown by the fact that 463 samples were submitted for test during the first six months of 1908, over one-half of them coming from Nebraska.		
	(7) Cooperative seed-testing laboratory, Columbia, Mo. (Mr. Brown, in cooperation with the Missouri Experiment Station). The operation of the cooperative laboratory at Lincoln, Nebr., has been so successful that it has led to the establishment of a similar laboratory at Columbia, Mo. The work at this laboratory was started in the fall of 1908.....	(7) Cooperative seed-testing laboratory, Columbia, Mo.....
	1,940.00	2,370.00
		(8) Cooperative seed-testing laboratory, Pacific coast.....
		2,250.00
		It is desired to establish a third cooperative laboratory at some point on the Pacific coast, in cooperation with one of the western state experiment stations, for which purpose the above estimate is made. This will greatly facilitate the work of seed testing,

EXPENDITURES, APPROPRIATIONS, AND ESTIMATES, DEPARTMENT OF AGRICULTURE.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
PHYSICAL LABORATORY.	PHYSICAL LABORATORY.	PHYSICAL LABORATORY.
(Lyman J. Briggs, physicist in charge.)	(Lyman J. Briggs, physicist in charge.)	(Lyman J. Briggs, physicist in charge.)
Salaries, statutory.....\$485.00	Salaries, statutory.....\$600.00	Salaries, statutory.....\$600.00
Salaries, lump fund.....8,228.34	Salaries, lump fund.....9,270.00	Salaries, lump fund.....9,270.00
Stationery, furniture, supplies, etc.....3,844.77	Stationery, furniture, supplies, etc.....4,000.00	Stationery, furniture, supplies, etc.....4,000.00
Miscellaneous expenses, freight, express, etc.....200.14	Miscellaneous expenses, freight, express, etc.....242.50	Miscellaneous expenses, freight, express, etc.....242.50
Traveling and station and field expenses.....1,238.52	Traveling and station and field expenses.....2,000.00	Traveling and station and field expenses.....2,000.00
Total.....13,996.77	Total.....16,112.50	Total.....16,112.50
PROJECTS.	PROJECTS.	PROJECTS.
(1) Cooperative physical investigations in the arid West (Doctor Briggs). This work is carried on in cooperation with Prof. E. C. Chilcott, agriculturist in charge of Dry Land Agriculture Investigations, and with other officers of the bureau. It consists of the measurement of the moisture, temperature, aeration, amount of evaporation, and other characters of the soils in the dry regions of the West, to determine the physical changes produced by the various crop rotations employed in the cooperative work in that region. These measurements are necessary for a proper interpretation of the results of the rotation and cultivation experiments, and to provide a basis for their highest possible development, and to find what methods of farming are most efficient in conserving the soil moisture and in maintaining a proper supply of plant food in the soil.....7,500.77	(1) Cooperative physical investigations in the arid West.....8,612.50	(1) Cooperative physical investigations in the arid West.....8,612.50
<i>Results.</i> —These experiments have only recently been inaugurated. Their value will increase rapidly as time goes on, for they will then represent more nearly the total range of conditions to be met with, and will show what can be done under extreme conditions as well as average conditions. The extreme conditions determine the success or failure of the small farmer of limited resources. The observations have already proved of great value in connection with the work on cultivation methods.		
(2) Centrifugal investigations of plant nutrient solutions (Doctor Briggs). The object of this work is to determine to what extent the growth of agricultural crops is controlled by the concentration and composition of the soil solution. The work is conducted with reference to crop yields under field conditions.....4,000.00	(2) Centrifugal investigations of plant nutrient solutions.....5,000.00	(2) Centrifugal investigations of plant nutrient solutions.....5,000.00
<i>Results.</i> —The results already obtained have shown important facts regarding the rate of nitrification and denitrification, and the conditions favoring each process. Experiments are in progress regarding the influence of the concentration of other plant food constituents, which, it is believed, will prove valuable in the judicious and economic application of fertilizers and the use of green manures.		
(3) Electrocultural experiments (Doctor Briggs). This work consists of field and greenhouse tests of the effect of electrostatic fields of varying intensity on plant growth, to determine whether the growth of plants is affected thereby, and, if so, whether plants can be forced economically in this way. The development and testing of electric wave soil moisture apparatus are also features of this work.....2,496.00	(3) Electrocultural experiments..2,500.00	(3) Electrocultural experiments..2,500.00
<i>Results.</i> —The results of these experiments have not shown any marked increase, either in growth or quality due to the electrical treatment. We have consequently advised interested persons to use caution in investing in expensive equipments which are claimed to give remarkable increase in yield and quality of vegetables and small fruits until further tests can be made by the department.		
GRAIN INVESTIGATIONS.	GRAIN INVESTIGATIONS.	GRAIN INVESTIGATIONS.
(M. A. Carleton, cerealist in charge.)	(M. A. Carleton, cerealist in charge.)	(M. A. Carleton, cerealist in charge.)
Salaries, statutory.....\$3,661.16	Salaries, statutory.....\$3,480.00	Salaries, statutory.....\$3,480.00
Salaries, lump fund.....27,564.45	Salaries, lump fund.....32,320.00	Salaries, lump fund.....36,300.00
Stationery, furniture, supplies, etc.....1,125.86	Stationery, furniture, supplies, etc.....2,563.30	Stationery, furniture, supplies, etc.....3,083.30
Miscellaneous expenses, freight, express, etc.....219.97	Miscellaneous expenses, freight, express, etc.....300.00	Miscellaneous expenses, freight, express, etc.....300.00
Traveling and station and field expenses.....8,386.09	Traveling and station and field expenses.....9,500.00	Traveling and station and field expenses.....12,800.00
Total.....40,957.53	Total.....48,163.30	Total.....55,963.30
Advance to A. H. Leidigh, temporary special disbursing agent.....874.14		
Total expenditures and liabilities.....41,831.67		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
GRAIN INVESTIGATIONS—Continued.	GRAIN INVESTIGATIONS—Continued.	GRAIN INVESTIGATIONS—Continued.
PROJECTS.	PROJECTS.	PROJECTS.
(1) Wheat investigation (Mr. Carleton). These investigations include the improvement of hard spring wheat for the Northwest; further investigations of durum wheat; the extension of the winter wheat area; and other problems connected with the wheat-growing industry. Much breeding, adaptation, and introduction work is carried on with a view to the development of improved varieties and their introduction into extensive cultivation..... \$4,300.00 <i>Results.</i> —The introduction of a new grain crop which produces annually about 40,000,000 bushels is a direct result of this work. This crop was fairly established two years ago, and the work is now directed toward growing pure types of the best varieties. The Kubanka variety has been found to be the best for bread flour. The most difficult and important part of the department's work has been the stimulation of the market for this wheat, especially as used for bread flour. About 15,000,000 bushels were used in this country in 1907 for bread; 20,000,000 bushels were exported. The price also has increased relatively. Hybrids of durum wheat with the Turkey variety appear to be more rust resistant than pure Turkey, but retain the general Turkey quality of grain. The Turkey variety can be made more valuable by producing earlier strains. It has been crossed with Zimmerman (early winter) with this end in view. The hybrids are now being tested. A successful cross of hard spring with durum has also been made which promises much. It has the excellent bread-making qualities of the former, and shows great rust resistance due to the durum parent. The area of Kharkov winter wheat has been extended north to South Dakota and west to the one-hundredth meridian. It is believed that this wheat can be extended north to southern North Dakota east of the one-hundredth meridian. It has also extended the winter wheat area far westward into semiarid districts. A number of improved strains of hard spring wheat have been distributed through the Minnesota and North Dakota experiment stations. These include the well-known new varieties Minnesota 163, 169, and 188, and also the Ghrka spring, a very hardy drought-resistant sort of excellent quality introduced into South Dakota from east Russia.	(1) Wheat investigation..... \$5,000.00	(1) Wheat investigation..... \$6,000.00
(2) Oat investigation (C. W. Warbauton, assistant agronomist). This work includes the improvement of oats in the Northwest, where adaptations and breeding work to ascertain better-yielding varieties of better quality than those now in use is being conducted in cooperation with the state experiment stations; the introduction of the Sixty-day oat, as well as of other improved varieties; and the development of varieties for special purposes, such as hardy winter oats, varieties for oatmeal manufacture, etc.. 5,400.00 <i>Results.</i> —The best varieties so far introduced are the Swedish Select and Sixty-day. Improved strains of these and other sorts are being selected and propagated. The Swedish Select especially is a fine oat for the whole northern Great Plains, yielding on an average 5 or 6 bushels more per acre than the ordinary varieties. The best of a number of very promising hybrid selections have been tested at a number of stations this year, with very favorable results. A large number of varieties and strains of winter oats are under test, some of which have already shown themselves much hardier than the varieties now commonly grown.	(2) Oat investigation..... 6,000.00	(2) Oat investigation..... 6,500.00
(3) Barley investigations (H. B. Derr, assistant). This work includes the improvement of barley for the Northwest, to secure by adaptation and selection better-yielding varieties of better quality than those now in use; the introduction of winter barley in the North; and the improvement of our present barleys, including the production of pure types..... 3,400.00 <i>Results.</i> —A selection of Manchurian barley distributed as "Minn. 106" is the best six-rowed barley in the Northwest. It yields one-third more than the ordinary strains. The best two-rowed sort so far introduced is the Hanna. A number of new introduced Bavarian two-rowed varieties are giving unusual yields in the Northwest. This variety has been introduced into parts of Kansas and southern Nebraska, where it yields from 10 to 15 bushels more per acre than spring-sown barleys, and furnishes abundant fall pasturage. Other winter sorts are now being established, which appear to be even better.	(3) Barley investigations..... 4,000.00	(3) Barley investigations..... 4,000.00
(4) Sorghum investigations (C. R. Ball, agronomist). This work consists in adaptation tests of domestic and imported sorghums, for a comparison of yields and a determination of the kinds that are best suited to particular localities. The object of the work is to establish the most hardy, especially the most drought-resistant grain sorghums in the semiarid regions of the Southwest, even in places where almost all other crops fail because of the drought..... 3,531.67	(4) Sorghum investigations..... 4,000.00	(4) Sorghum investigations..... 4,000.00

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
GRAIN INVESTIGATIONS—Continued.	GRAIN INVESTIGATIONS—Continued.	GRAIN INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p><i>Results.</i>—Dwarf forms of milo are found to be best for the high southwestern plains. Many introductions and selections are being tested and improved in earliness. Special strains of kafir have been so rigidly selected for earliness that it is possible now to mature this crop at much higher elevations and farther north than was before possible. The cause of the sterility of certain sorghums in the South has been described, in the sorghum ridge, and experiments are being made looking to its prevention.</p> <p>(5) Cereal diseases (E. C. Johnson, pathologist). This work includes studies of the life histories of the grain rusts and smuts, together with the methods of preventing these diseases. It is also the aim to obtain all knowledge possible about the conditions favorable or unfavorable to the diseases; all varieties resistant to disease and all possible information which will reduce or eliminate the enormous loss from these pests.....</p> <p><i>Results.</i>—Some of the principles of resistance to these diseases have been discovered. Rust-resistant varieties of wheats are now known and the prospects seem fairly bright for breeding this quality of rust resistance into those wheats and other grains which are most in need of it. A new method has also been discovered to test at will any cereals for their rust-resistant qualities without the delay and loss of time necessary in the old method of waiting for an epidemic. Practical methods have recently been discovered to prevent all the known smuts of small grains, also grain smut of sorghum, which has in recent years become a serious disease. Important results have been obtained in the study of the head smut of sorghum, which will undoubtedly open the way to the practical handling of this insidious and dangerous disease. And finally the foundation plans have been laid for a sweeping movement against smuts of small grains which, with proper support, ought to result in the practical elimination of these smuts from the map of the United States, resulting in many millions annual profit to the country.</p> <p>(6) Grain experiments in the Texas Panhandle (John W. Ross, superintendent). This work consists of the maintenance of an experimental farm at Amarillo, Tex., and also field experiments at Chillicothe, the work at both points being carried on in cooperation with the Texas Experiment Station. The object of the work is to determine what can be done in the way of grain cultivation in that part of the country, but the results will be applicable to a considerable larger area. Although chief attention is given to grains, work with other field crops is being carried on in cooperation with other offices of the Bureau of Plant Industry.....</p> <p><i>Results.</i>—It has been found that certain varieties of cereals can be successfully grown in this region, such as black winter emmer, Galgalos and Fretes wheat, and some varieties of grain sorghums and kafir corns. We have at our disposal in this high semiarid district 100 acres of land, with the necessary buildings, donated by the business men of that section. The country now is largely devoted to grazing, but largely as a result of our experiments winter wheat is now grown to a considerable extent in that region—twenty-five times the area in such wheat in 1905—and the hard winter wheat production of Texas Panhandle now compares well with that of western Kansas west of the ninety-ninth meridian.</p> <p>(7) Investigations of dry-land cereals (W. M. Jardine, agronomist). This work is being conducted in the Great Plains area and the dry and high intermountain districts of the West. A large part of the work consists of adaptation experiments with different varieties of durum wheat, emmer, hull-less barley, early oats, spring rye, and other grains believed to be suitable for these districts. An attempt is also being made to develop or secure sorghums and millets that will mature in higher latitudes and at higher altitudes.....</p> <p><i>Results.</i>—Emmer is now practically established as a crop in North and South Dakota. A new winter emmer has been found which is more resistant to rust, cold, and drought than the sorts now in use. The crop is being more and more recognized as a good stock food and is found well adapted to dry-land areas. The new winter hardy variety not only has all the qualities of the ordinary spring-sown emmer, but furnished also good fall pasturage.</p> <p>During the present year investigation of dry-land cereals has been greatly extended. New stations have been established in the States of Utah, Montana, Colorado, Texas, and South Dakota, and already a large number of varieties are being tried in these States. A series of experiments has also been started to ascertain the best time at which to seed different crops in these new localities.</p>	<p>(5) Cereal diseases..... \$7,500.00</p> <p>(6) Grain experiments in the Texas Panhandle..... 4,000.00</p> <p>(7) Investigations of dry-land cereals..... 10,000.00</p>	<p>(5) Cereal diseases..... \$8,000.00</p> <p>(6) Grain experiments in the Texas Panhandle..... 4,000.00</p> <p>(7) Investigations of dry-land cereals..... 14,000.00</p>
\$6,500.00		
3,500.00		
8,400.00		

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
GRAIN INVESTIGATIONS—Continued. PROJECTS—continued. (8) Crop rotations in relation to cereals (Mr. Carleton). This work consists of experiments with plats of various legumes in alternation with cereals, to determine the effect of the former on the latter and on the soil..... \$2,500.00 <i>Results.</i> —Good results have already been obtained in California, showing the necessity of a thorough rotation of this kind with legumes to give better wheat yields and help rid the fields of weeds. (9) Investigation of the food value of grains (Mr. Carleton, in cooperation with J. S. Chamberlain, of the Bureau of Chemistry). This work is conducted chiefly with wheats, having for its object the determination by chemical analyses of the proteid content of different varieties and types of grain, both native and introduced, in order to ascertain the actual value from this standpoint of new or improved varieties, thus giving necessary aid in the improvement of wheat and other grains..... 2,300.00 <i>Results.</i> —Extensive series of analyses have been made of wheat, oat, rice, and sorghum varieties, which are especially valuable in indicating the relative merits as foods of many cereal introductions. (10) Study of the effect of environment of the composition of grains (Mr. Carleton, in cooperation with J. A. Le Clerc, of the Bureau of Chemistry). The objects of this work are to determine the effects of soil and climate, fertilizers, etc., on cereal composition, and also the causes of deterioration in the quality of wheat grown in certain seasons or localities. Experiments in different methods of cultivation and applications of different amounts of irrigation water are a part of the work, and chemical analyses of the grain obtained from these tests are made..... 2,000.00 <i>Results.</i> —It has been found that an oversupply of water causes the production of "white grains" in durum wheat and of "yellow berry" in winter wheats. Too much water should not be applied in irrigation. This partly explains the deterioration of wheat in California. Some results showing striking effects of changes of soil and climate on the chemical composition of wheat kernels are also at hand.	GRAIN INVESTIGATIONS—Continued. PROJECTS—continued. (8) Crop rotations in relation to cereals..... \$3,000.00 (9) Investigation of the food value of grains..... 2,500.00 (10) Rice investigations (C. E. Chambliss, expert). The objects of the work are to secure data on the comparative yielding power and qualities of rice grown under the methods of cultivation practiced in southwestern Louisiana; to determine the effect of environment on composition of Carolina Gold, Honduras, and Japan rices planted in the South; to secure by selection varieties resistant to blast; and to determine the possibilities of rice production in California. The introduction of better yielding varieties and the improvement of cultural methods of growing rice are also objects sought.. 2,163.30 <i>Results.</i> —The work of the year on the cooperative rice experimental farm at Crowley, La., has furnished some important results in addition to the numerous tests of varieties and tests with different fertilizers and methods of watering, which latter require several years' work to obtain reliable information. A study was made on this farm of the manner and time of opening of the rice flower, which will be of much value in aiding all future work in cross-breeding of rice. It was found that only at a certain time during the forenoon is it possible to form satisfactory cross-pollination, as it is only at this time that the flower is in condition to facilitate these operations.	GRAIN INVESTIGATIONS—Continued. PROJECTS—continued. (8) Crop rotations in relation to cereals..... \$3,000.00 (9) Investigation of the food value of grains..... 2,500.00 (10) Rice investigations..... 3,963.30

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
TOBACCO INVESTIGATIONS.		
(A. D. Shamel, E. H. Mathewson, and W. W. Garner, in charge.)		
Salaries, statutory.....	\$1,965.66	Salaries, statutory..... \$1,320.00
Salaries, lump fund.....	27,984.05	Salaries, lump fund..... 28,000.00
Stationery, furniture, supplies, etc.....	1,300.00	Stationery, furniture, supplies, etc..... 1,687.74
Miscellaneous expenses, freight, express, etc.....	367.00	Miscellaneous expenses, freight, express, etc..... 500.00
Traveling and station and field expenses.....	7,434.00	Traveling and station and field expenses..... 7,500.00
Total.....	39,056.71	Total..... 39,007.74
PROJECTS.		
(1) General supervisory and office work (Mr. Shamel and Mr. Mathewson). This project includes the planning and direction of the field work, the conduct of correspondence, all necessary traveling expenses in supervising the work, etc.....	4,556.71	(1) General supervisory and office work..... 4,970.24
<i>Results.</i> —The results under this project are reflected in the progress noted under the other projects, described in the following paragraphs.		
(2) Chemico-physiological tobacco investigations (W. W. Garner, assistant). Special attention is being given to the study of elasticity, burn, and nicotine content of the leaf and the influence of fertilizers on the quality of tobacco. A study of the pole burn, which causes great loss in tobacco curing, is also being made in the laboratory and in the field; as is also an investigation of the changes produced during the curing of tobacco in the barn and also during the processes of fermentation. All of this work is closely associated with the field work, and the examination and determination of the qualities of the various hybrid tobaccos which have been developed are made on the basis of the laboratory investigations..	4,500.00	(2) Chemico-physiological tobacco investigations..... 4,350.00
<i>Results.</i> —A new method of testing the burn of cigar tobacco has been devised and is now in use in practical tobacco-breeding work. It has been shown that good and poor burning qualities are inherited. A new method of increasing the burning quality of the cured leaf has been developed and is now being further studied and perfected. A new method for the determination of nicotine in tobacco has also been developed. The results so far achieved in these investigations have been published in bulletin form. It has been found that tobacco plants vary with respect to the amount of nicotine they contain, thus giving a basis for breeding strains of tobacco of high or low nicotine content. Breeding experiments are being carried on in Connecticut, Ohio, and Florida tobacco districts to produce strains of low nicotine content, but retaining the other valuable qualities of the leaf.		
(3) Tobacco investigations in the Connecticut Valley (Mr. Shamel and J. B. Stewart, expert). The work in Connecticut consists in the improvement of the native tobaccos by hybridization and selection, the improvement of shade tobaccos by selection, breeding, and fertilization, and the improvement of the methods of curing and packing the crop. Considerable attention is also being given to tobacco diseases, both in the seed bed and in the field. Especial attention is being devoted to a root rot which has caused very great damage for the past two years, and attempts are being made to secure strains of tobacco resistant to this disease and to study the effects of crop rotation upon its prevalence.....	5,500.00	(3) Tobacco investigations in the Connecticut Valley..... 5,250.00
<i>Results.</i> —Several new and valuable tobacco hybrids have been developed. Among these the Brewer, a cross of the Connecticut Broadleaf and Cuban, has great advantages over the ordinary Connecticut Broadleaf in the general shape of the leaf, and yielding a larger proportion of high-grade wrapper of better quality. The Colley, a hybrid between the Habana Seed variety and the Sumatra, has a larger number of better-shaped leaves, finer venation, more regular texture from tip to base, excellent burn, and great uniformity. The Uncle Sam Sumatra and the Hazlewood Cuban, which are recent selections, have proved superior to any other types of their class for cigar wrappers, not only in the Connecticut Valley, but in Florida, Georgia, and other cigar tobacco districts. All of these new hybrid tobaccos have given increased yields of better quality than the ordinary tobaccos, and many large and successful growers are planning to use these varieties exclusively as a result of their favorable experience with them under trial. Considerable quantities of seed of the newly developed tobaccos will be distributed to interested growers the coming season, and the demand for such seed has already grown beyond the quantities available for distribution.		

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
TOBACCO INVESTIGATIONS—Continued.	TOBACCO INVESTIGATIONS—Continued.	TOBACCO INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>(4) Tobacco investigations in Florida and Georgia (Mr. Shamel). The work in Florida and Georgia is along similar lines to that conducted in Connecticut, including the general improvement in methods of cleaning and saving seed, the improvement of types by hybridization and selection, the testing of new cigar wrapper types, such as the Uncle Sam Sumatra and the Hazlewood Cuban, both of which have proved extremely valuable in Florida, and in the production of nematode-resistant strains of tobacco. An extensive test of fertilizers, and the relation of different combinations to the yield and quality of the tobacco, has been undertaken in soil where the conditions are favorable for securing valuable comparative results. The work started by the Bureau of Soils in Leon and Madison counties has also been continued, consisting in the growing of Sumatra tobacco under shade.....</p> <p><i>Results.</i>—New methods of saving and cleaning seed have been introduced into Florida, with the result of greatly improving the vigor and uniformity of the crops grown. The new Uncle Sam Sumatra tobacco has given excellent results in Florida, and is pronounced by tobacco experts to be superior to any other Sumatra tobacco grown in the State. The Hazlewood Cuban tobacco has proved to be of special merit for cigar filler production yielding a high-grade filler of desirable flavor and aroma.</p> <p>A nematode-resistant type of cigar-wrapper tobacco has been produced by seed selection, which it is believed will serve to greatly lessen the serious annual loss now sustained by southern tobacco growers from this injury. Several of the largest planters of Florida and Georgia have set aside special tobacco breeding fields where they carry on seed selection and breeding according to the methods developed and introduced by the Bureau of Plant Industry. A limited supply of seed of new and improved varieties is furnished these breeders and further improvement of these varieties is now being conducted by these men.</p>	<p>(4) Tobacco investigations in Florida and Georgia..... \$2,300.00</p>	<p>(4) Tobacco investigations in Florida and Georgia..... \$2,300.00</p>
<p>(5) Tobacco investigations in Maryland (E. H. Mathewson, expert). The work in Maryland is conducted in cooperation with the State Experiment Station, which defrays all contract obligations in connection with the experiments, provides for the distribution of seed, and furnishes the station facilities for the work. So far the work has been along the line principally of improving the types of hybridization and selection. It is now proposed to develop the Maryland work along the same lines as that in Virginia, giving more attention to the general farm problems where tobacco constitutes one crop in a rotation....</p> <p><i>Results.</i>—In the hybridization and selection work considerable progress has been made, and some of the improved types and hybrids already introduced are considered by growers as distinct improvements over the ordinary types. The selected fields grown under the supervision of the department are said to be the finest tobacco fields in the State.</p> <p>The methods of saving and separating seed introduced by the Bureau of Plant Industry have been widely adopted by the growers, and have given very satisfactory results in both better yields and improved qualities of the tobacco. Several tobacco growers have taken up the systematic breeding of tobacco as a result of these investigations.</p>	<p>(5) Tobacco investigations in Maryland..... 1,725.00</p>	<p>(5) Tobacco investigations in Maryland..... 1,725.00</p>
<p>(6) Tobacco investigations in Kentucky and Tennessee (Mr. Shamel, in cooperation with W. H. Scherffius, collaborator, agronomist of the Kentucky Experiment Station, formerly tobacco expert in the Bureau of Plant Industry). This work is carried on in cooperation with the Kentucky Experiment Station, the Department of Agriculture furnishing two assistants to work under the direction of Mr. Scherffius. The problems consist, as in Virginia, in the improvement of the yields and crops by careful seed selection and breeding, as well as the improvement of the general farm methods, especially along the line of crop rotation.....</p> <p><i>Results.</i>—Very satisfactory progress is being made in all of the Kentucky work. These investigations were only started a year or so ago, and in general it may be said that the same methods are being pursued as have produced such satisfactory results in Connecticut, Florida, and other States. A large number of hybrids and selections of the many types of tobacco grown in Kentucky have been made and tested in experimental fields the past season. A curing barn has been provided by the experimental station for the purpose of studying curing conditions. Several fertilizer tests are being made in the different districts.</p>	<p>(6) Tobacco investigation in Kentucky and Tennessee.. 3,300.00</p>	<p>(6) Tobacco investigations in Kentucky and Tennessee.. 3,300.00</p>
\$2,000.00		
1,500.00		
3,500.00		

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
TOBACCO INVESTIGATIONS—Continued.	TOBACCO INVESTIGATIONS—Continued.	TOBACCO INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(7) Tobacco investigations in Texas (W. M. Hinson and Otto Olson, experts). The work in Texas was inaugurated by the Bureau of Soils about five years ago, having for its object the introduction of the culture of cigar-filler tobacco, by growing the product from imported Cuban seed. This part of the industry is now fairly well established, but the question of improving this filler tobacco by selection and breeding needs attention, because the yield is low and the quality uneven. The indications are that marked improvements can be easily obtained by the methods followed in Florida, and after the completion of the present year's work it is planned to reorganize the Texas investigations along the practical lines of breeding and selection, and the improvement of farm practice. \$5,000.00 <i>Results.</i> —Improved strains of Cuban tobacco from Texas-grown seed has been found to produce about double the yield of crops grown from imported seed. The past season sufficient seed of these improved strains has been saved under bag to furnish all seed needed for planting the coming season. The methods of fertilization best adapted to the production of the greatest yield of high quality of filler tobacco is being studied, and experiments have been laid out for the coming season to determine the best combination of fertilizers and methods of culture to raise profitable crops.	(7) Tobacco investigations in Texas..... \$5,316.67	(7) Tobacco investigations in Texas..... \$5,316.76
(8) Tobacco investigations in Virginia and North Carolina (E. H. Mathewson and W. W. Green, experts). This work was begun by the Bureau of Soils in 1904, having for its object the improvement of dark and fire-cured tobaccos in the Appomattox region by better methods of crop rotation and farm practice. The Virginia Experiment Station cooperates in the conduct of the work, furnishing two assistants. The work is handled from the general standpoint of improving farm practice as a whole, rather than from the strict tobacco view point. In addition to this work, experiments are to be inaugurated in the improvement of the tobaccos by selection and hybridization..... 6,000.00 <i>Results.</i> —Very important results have been secured and the demonstrations are attracting wide attention. It has been shown that it is necessary to rotate the tobacco crop with other general farm crops, and that profitable yields of grass, wheat, and other general farm crops can be secured in the tobacco fields, and the soil improved for the growing of tobacco. The results of experiments demonstrate that the use of much more intensive methods of culture are desirable. An increased and more intelligent use of fertilizers on limited areas will produce more profitable results than the present more extensive system of farm practice. Improved strains of Virginia tobaccos are being produced by seed selection and breeding.	(8) Tobacco investigations in Virginia and North Carolina... 6,312.50	(8) Tobacco investigations in Virginia and North Carolina .. 6,312.50
(9) Tobacco investigations in Alabama (W. M. Hinson, expert). The work in Alabama is also a continuation of the investigations inaugurated in that State by the Bureau of Soils. At present about 225 acres of Cuban tobacco are being grown experimentally by farmers; and two experiments are being conducted in the production of shade Sumatra tobacco. The demand for the continuance and extension of this work in Alabama is very strong, and it should be continued at least for another season. The problems are very complicated and need to be taken up from the standpoint of the general cropping system and the adaptation and improvement of special types of tobacco to meet the particular requirements in the State. The situation in Alabama needs to be worked out slowly and with careful consideration of all the problems involved, as an undue stimulation of the industry would be unwise. 2,500.00 <i>Results.</i> —Selections of seed of the best plants from the filler standpoint have been made, and will be distributed to the growers for next season's planting. Methods of fertilizing the soil, and curing and fermenting the tobacco are being investigated.	(9) Tobacco investigations in Alabama..... 2,733.33	(9) Tobacco investigations in Alabama..... 2,733.33
(10) Tobacco investigations in Ohio (Mr. Shamel, in cooperation with A. D. Selby, collaborator, botanist of the Ohio Experiment Station). These investigations are conducted in cooperation with the Ohio Experiment Station, having for their object the improvement of the native tobaccos by hybridization and selection. The work taken over from the Bureau of Soils consists in the improvement of the methods of fermentation of the native tobaccos so as to reduce the amount of dry rot resulting from the old methods. 1,500.00 <i>Results.</i> —Good progress has already been made in the hybridization and selection work, which was only started a year or so ago. A large number of new types,	(10) Tobacco investigations in Ohio..... 650.00	(10) Tobacco investigations in Ohio..... 650.00

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
TOBACCO INVESTIGATIONS—Continued. PROJECTS—continued. <p>hybrids, and improved strains of tobacco have been tested, some of which have been found to possess special merit for cigar-filler production, giving a high yield per acre, and possessing a desirable flavor and aroma. Several wrapper types also show merit and value for commercial propagation. The work of the Bureau of Soils in Ohio has been productive of very satisfactory results. The introduction of the bulk fermentation method has reduced the amount of rot considerably, but a further study of the question by a pathologist is necessary. The work on bulk fermentation was started by the Bureau of Soils in 1902, and in 1903-4 that bureau also planted test crops of tobacco, the product being fermented and packed by its experts and samples sent to the trade. The improved methods of sowing and separating seed have been introduced and are now in general use by tobacco growers.</p> <p>(11) Tobacco investigations in New York (G. W. Harris, expert). The work in New York, like that in Virginia, Alabama, and Texas, is a continuation of experiments started by the Bureau of Soils. These are located in Onondaga County, where the tobacco grown is the same as that grown in the Connecticut Valley. The New York product, however, has deteriorated during recent years in quality and price, owing either to the fact that the crop is not planted on the right kind of soil for the production of good wrapper, or to a lack of knowledge in the application of fertilizers and the general handling of the crop. The object of the experiments is to determine the cause of the difficulty and to correct it..... \$2,000.00</p> <p><i>Results.</i>—The work so far has shown that there is much room for improvement both in cultural methods and in the types of tobacco grown. It is believed that the improved Connecticut strains will also do well in New York, and a considerable quantity of improved seed grown in experimental plots has been saved for distribution to the growers the coming season. The introduction of the bulk methods of fermentation is being successfully carried on.</p> <p>(12) Tobacco investigations in California (J. B. Stewart, expert). The work in California consisted merely in a preliminary experiment to demonstrate either positively or negatively, whether good cigar filler tobacco can be profitably produced in that State. On account of the dry climate, the problem is a complicated one. The State of California has appropriated \$1,000 for augmenting the work, to be expended under the direction of the department. Only a small acreage has been planted and the work so far is strictly preliminary. The fermentation of this year's experimental crop will be supervised by one of the department's experts..... 500.00</p>	TOBACCO INVESTIGATIONS—Continued. PROJECTS—continued. <p>(11) Tobacco investigations in New York..... \$2,100.00</p>	TOBACCO INVESTIGATIONS—Continued. PROJECTS—continued. <p>(11) Tobacco investigations in New York..... \$2,100.00</p>
MISCELLANEOUS PLANT BREEDING AND RELATED WORK. (Conducted by various investigators.) <p>Salaries, statutory..... \$400.00 Salaries, lump fund..... 3,100.00 Stationery, furniture, supplies, etc..... 130.00 Miscellaneous expenses, freight, express, etc..... 100.00 Traveling and station and field expenses..... 800.00 Total..... 4,530.00</p>	MISCELLANEOUS PLANT BREEDING AND RELATED WORK. (Conducted by various investigators.) <p>Salaries, statutory..... \$400.00 Salaries, lump fund..... 4,500.00 Stationery, furniture, supplies, etc..... 200.00 Miscellaneous expenses, freight, express, etc..... 141.00 Traveling and station and field expenses..... 1,000.00 Total... 6,241.00</p>	MISCELLANEOUS PLANT BREEDING AND RELATED WORK. (Conducted by various investigators.) <p>Salaries, statutory..... \$400.00 Salaries, lump fund..... 5,500.00 Stationery, furniture, supplies, etc..... 200.00 Miscellaneous expenses, freight, express, etc..... 141.00 Traveling and station and field expenses..... 2,000.00 Total..... 8,241.00</p>
PROJECTS <p>(1) Breeding rust-resistant asparagus (A. D. Shamel). This work is conducted in cooperation with the Massachusetts Experiment Station, having for its object the securing of strains of asparagus which will be resistant or immune to the rust disease, which is threatening the industry in a number of sections... 1,500.00</p> <p><i>Results.</i>—A large number of varieties, strains, and selections from resistant asparagus plants have been planted in an experimental field located near Concord, Mass. Hybrids of resistant uncultivated varieties and the commercial varieties have been made and will be tested in this experimental field. It is necessary to carry on these tests for three seasons to get a final test of the resistance of the different strains, but evidence has already been secured showing that some of them are resistant and valuable.</p>	PROJECTS <p>(1) Breeding rust-resistant asparagus..... 2,500.00</p>	PROJECTS. <p>(1) Breeding rust-resistant asparagus..... 3,500.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
MISCELLANEOUS PLANT BREEDING AND RELATED WORK—Cont'd.	MISCELLANEOUS PLANT BREEDING AND RELATED WORK—Continued.	MISCELLANEOUS PLANT BREEDING AND RELATED WORK—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(2) Improvement of potatoes through tuber selections and production of new varieties from seed (A. D. Shamel). This work, which is conducted chiefly in Illinois and Connecticut, has for its object the production of high-yielding and high starch-producing new varieties from seed..... \$500.00 <i>Results.</i> —A large number of varieties propagated from seed which have shown desirable characteristics are being tested for their comparative commercial value. Several promising varieties have been secured, and if their value is fully established by another season's testimony will be distributed to potato growers.	(2) Improvement of potatoes through tuber selections and production of new varieties from seed..... \$1,000.00	(2) Improvement of potatoes through tuber selections and production of new varieties from seed..... \$1,000.00
3) The introduction and improvement of vetches for use as cover crops for tobacco fields (A. D. Shamel). The purpose of this work, conducted in the Connecticut Valley, New York, Kentucky, Ohio, and Maryland, is to introduce and breed acclimated strains of hairy vetch (<i>vicia villera</i>) for growing on tobacco lands as cover crops to conserve soil fertility, reduce the expense of commercial fertilizers by adding to the humus content and nitrogen supply of the soil..... 630.00 <i>Results.</i> —Acclimated strains of hairy vetch have been produced in the Connecticut Valley. It has been demonstrated that the tobacco grown on soils where these improved strains of inoculated vetch have been grown produces a larger yield of improved quality than where this cover crop has not been grown. The hairy vetch crops add to the soil from \$12 to \$25 worth of nitrogen to the acre, thus reducing the expense for commercial fertilizers for nitrogen to this extent. Improved methods of seed production are being developed to the end that growers can produce their own vetch and at reduced cost.	(3) The introduction and improvement of vetches for use as cover crops for tobacco fields..... 1,441.00	(3) The introduction and improvement of vetches for use as cover crops for tobacco fields..... 2,441.00
(4) Improvement of various plants by hybridization (G. W. Oliver, expert). This work includes the improvement of celery, lettuce, and other plants by hybridization; the development of new races of alfalfa, clover, and cowpeas, varieties of tomatoes for forcing under glass; the growing of Bermuda lilies from seed; the crossing of varieties of oats, grasses, etc., to secure improved characters; and other lines of hybridization work..... 700.00 <i>Results.</i> —A great number of hybrids have been made and many fixed types secured that promise to be of great value to growers. These new races are being tested for commercial production and the races that prove valuable will be distributed for commercial planting.	(4) Improvement of various plants by hybridization..... 1,000.00	(4) Improvement of various plants by hybridization..... 1,000.00
5) Testing fine-ground feldspar as a potash fertilizer (A. D. Shamel and A. S. Cushman). This work includes the testing of finely ground feldspar as a source of potash fertilizer for tobacco crops in the Connecticut Valley, Florida, and other tobacco-growing districts. 1,200.00 <i>Results.</i> —The tobacco crops grown on soil where the finely ground feldspar was used have as a rule proven to be of as high yield and as good quality as where imported carbonate of potash or other source of potash supply has been used. It is necessary to carry these tests on for at least two seasons more in order to determine fully the comparative value of the feldspar.	(5) Testing fine-ground feldspar as a potash fertilizer..... 300.00	(5) Testing fine-ground feldspar as a potash fertilizer..... 300.00
COTTON-BREEDING INVESTIGATIONS.	COTTON-BREEDING INVESTIGATIONS.	COTTON-BREEDING INVESTIGATIONS.
(A. D. Shamel and D. N. Shoemaker, jointly in charge.)	(A. D. Shamel and D. N. Shoemaker, jointly in charge.)	(A. D. Shamel and D. N. Shoemaker, jointly in charge.)
Salaries, statutory..... \$770.67 Salaries, lump fund..... 10,854.51 Stationery, furniture, supplies, etc..... 1,550.00 Miscellaneous expenses, freight, express, etc..... 639.73 Traveling and station and field expenses..... 4,636.18 Total..... 18,451.09	Salaries, statutory..... \$1,400.00 Salaries, lump fund..... 9,336.00 Stationery, furniture, supplies, etc..... 1,800.00 Miscellaneous expenses, freight, express, etc..... 750.00 Traveling and station and field expenses..... 4,650.11 Total..... 17,936.11	Salaries, statutory..... \$1,400.000 Salaries, lump fund..... 9,836.00 Stationery, furniture, supplies, etc..... 2,000.00 Miscellaneous expenses, freight, express, etc..... 750.00 Traveling and station and field expenses..... 5,450.11 Total..... 19,436.11
PROJECTS.	PROJECTS.	PROJECTS.
(1) Office and supervisory work (Doctor Shoemaker). This project includes the direction and management of the field work, the carrying on of correspondence, and all routine details connected with the cotton-breeding work..... 3,270.67 <i>Results.</i> —The results under this project are reflected in the progress noted hereafter under the various field and laboratory projects.	(1) Office and supervisory work.. 3,950.11	(1) Office and supervisory work.. 3,950.11
(2) Laboratory work on cotton (Doctor Shoemaker). This work includes microscopical examinations of cotton fiber to determine the origin of weak fibers, to learn the nature and extent of gin damage, to ascertain what effect storm and exposure have on quality of lint, and to study the early growth of cotton fiber, in the hope of throwing additional light on the breeding problems..... 700.00	(2) Laboratory work on cotton... 775.00	(2) Laboratory work on cotton... 775.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (§4 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
COTTON-BREEDING INVESTIGATIONS—Continued.	COTTON-BREEDING INVESTIGATIONS—Cont'd.	COTTON-BREEDING INVESTIGATIONS—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p><i>Results.</i>—The results of the laboratory research in cotton breeding are reflected in the results obtained in all of the field work described in the following paragraphs. The laboratory work is indispensable as an aid to the breeding of improved varieties of cotton under field conditions.</p> <p>(3) Breeding cottons adapted to northern Texas (Doctor Shoemaker). This work consists of two main phases, namely, the breeding of cotton for the black-land belt and the breeding of cotton for the sandy-land belt. In the former line the object is to obtain better yielding and earlier strains of short staple, and a long-staple variety adapted to black land conditions. In the breeding work in the sandy-land belt the object is to obtain improved short-staple varieties for that region. \$900.00</p> <p><i>Results.</i>—In the development of early prolific premium cottons, types with lint from an inch to an inch and a quarter in length have demanded a premium of from 1 to 4 cents a pound. Three promising types have been developed, including a hybrid between Triumph and Sunflower, which is to be distributed this year. Strains of Bohemian, Boykin's Storm Proof, and other varieties have been developed, and their superiority to the original variety has been demonstrated. These improved cottons are being rapidly placed in the hands of cotton growers.</p> <p>(4) Breeding cottons adapted to northwest Texas (D. A. Saunders, special agent). The object of this work is to secure varieties whose bolls open early, in order to be suited for growth much farther north and west in Texas than cotton is generally grown. It is possible to grow cotton successfully in this region, but the main difficulty is that the bolls of the present varieties do not open early enough to escape frost. It is believed that by systematic breeding work this obstacle can be surmounted. 500.00</p> <p><i>Results.</i>—This work has been but recently inaugurated and has therefore not yet yielded definite results. It can be said, however, that the first season's experiments give every promise of leading to ultimate success in developing varieties of cotton suited to the Panhandle of Texas.</p> <p>(5) Breeding cottons adapted to southern Texas (D. A. Saunders, special agent). This work has for its object the securing of short-staple varieties with an earlier season than the native sorts. On account of the many undesirable characters of the early small-boll varieties, the breeding has been confined to crossing and selection among the large-boll types. 2,250.00</p> <p><i>Results.</i>—A hybrid of Triumph and King has been distributed under the name of Tring. This variety has almost as large a boll as Triumph, a high percentage of lint to seed cotton, and a better length of staple than King. It is very productive, earlier than Triumph, and has shown itself to be especially well adapted to river valley conditions in the boll-weevil region.</p> <p>A hybrid between Cook's Improved and Triumph has also been developed, and is being distributed under the name of Crenshaw. It is early, very large balled, and has a very high percentage of lint. This hybrid is especially adapted to black-land conditions. Other improved types are being rapidly developed in the work.</p> <p>(6) Breeding long-staple upland cottons for Louisiana, etc. (D. A. Saunders, special agent). The main object of this work is to secure by hybridization and selection a long-staple variety which may be grown in the long-staple regions in the presence of the boll weevil. This is about the most difficult phase of the whole breeding problem at present, as the indications are that the old long-staple varieties will be doomed to fail under weevil conditions. 800.00</p> <p><i>Results.</i>—Several promising varieties are now under test, the best of which is an unnamed hybrid between Triumph and Sunflower. This is already quite uniform, and has proved itself to be early and productive. It made as good a crop as King and Shine at Shreveport this year, under severe weevil conditions. The older long-staple varieties by the side of this yielded almost nothing. The lint has been passed upon by expert long-staple buyers and has been priced at 19½ cents on a basis of 11-cent middling cotton. There is enough of this seed for distribution next year, when it is planned to send it to all the long-staple region then released from quarantine against seed from the weevil-infested region.</p> <p>(7) Breeding cottons adapted to Tennessee and Arkansas (S. M. Bain, special agent). This work is conducted in cooperation with the Tennessee Experiment Station. It is mainly in anticipation of the boll weevil, having for its objects the securing of more productive, earlier, large-bolled cottons for these States. Some attention is also being given to length and strength of staple. 1,206.00</p>	<p>(3) Breeding cottons adapted to northern Texas. \$975.00</p> <p>(4) Breeding cottons adapted to northwest Texas. 700.00</p> <p>(5) Breeding cottons adapted to southern Texas. 2,600.00</p> <p>(6) Breeding long-staple upland cottons for Louisiana, etc. 825.00</p> <p>(7) Breeding cottons adapted to Tennessee and Arkansas. 1,368.00</p>	<p>(3) Breeding cottons adapted to northern Texas. \$975.00</p> <p>(4) Breeding cottons adapted to northwest Texas. 1,000.00</p> <p>(5) Breeding cottons adapted to southern Texas. 2,600.00</p> <p>(6) Breeding long-staple upland cottons for Louisiana, etc. 1,500.00</p> <p>(7) Breeding cottons adapted to Tennessee and Arkansas. 1,368.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
COTTON-BREEDING INVESTIGATIONS—Continued.	COTTON-BREEDING INVESTIGATIONS—Cont'd.	COTTON-BREEDING INVESTIGATIONS—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p><i>Results.</i>—Satisfactory progress is being made in fixing an early strain of cotton much better than King for cultivation in Tennessee. This variety was found in southern Missouri. A number of hybrids are in their first generation, and an extensive series of observations for determining which plants in a progeny row are earliest are being made in order to assist in the breeding for earliness.</p> <p>(8) Cooperative cotton breeding work in Georgia (Mr. Shamel). The objects of this work are to develop methods of judging cotton from the breeder's standpoint, to establish varietal standards for judging the merits of individual samples of the existing varieties of cotton, to organize and cooperate with cotton breeders' associations for the purpose of improving the present methods of growing, handling, and distributing the seed of established varieties, so as to enable the growers to secure reliable and unmixed seed from cotton breeders, and to stimulate an interest among growers in the use of improved varieties. \$1,800.00</p> <p><i>Results.</i>—As a result of the interest aroused among cotton growers in this region during the course of one season's preliminary work, a series of cooperative tests of varieties of cotton adapted to the soil and climatic conditions of northern Georgia, and in this connection several breeding experiments with growers were undertaken in 1908. The results of these tests, conducted on a commercial scale, have been almost startling, arousing the greatest interest among the cotton growers all over Georgia, as evinced by their continued visits to these experimental fields. A direct result of this work has been the organization of the Georgia Cotton and Corn Breeders' Association, made up for the most part of the cooperators in this work. Its object is the mutual help and intercourse so necessary to the carrying out of this project on the far-reaching scale anticipated.</p> <p>(9) Breeding cottons adapted to South Carolina (E. B. Boykin, special agent). The objects of this work are to develop an earlier and more prolific type of short-staple upland cotton and to secure a type suited to South Carolina with longer lint and greater productiveness; also to obtain by selection early maturing cottons of short season or determinate growth, which will be better adapted for cultivation in boll weevil infested regions. 2,500.00</p> <p><i>Results.</i>—The work in South Carolina has had the direct result of influencing farmers to begin the selection of cotton on their own score. A number of varieties are being systematically selected to increase their productiveness and earliness, and several of the standard sorts have been improved in this way, notably the Pride of Georgia and the Jones Improved. Seed of these improved varieties has been distributed to growers.</p> <p>(10) Miscellaneous cotton investigations in South Carolina (E. B. Boykin, special agent). This work includes a test of the advisability of fertilizing cotton during the growing period according to the Williamson method of fertilizing corn; of the value of vetch for planting in cotton fields as a winter crop; and of the effect on the quantity of lint cotton of holding seed cotton in bulk for a period before ginning. Attention is also being given to the encouragement of individual selection of cotton varieties by the growers. 1,524.42</p> <p><i>Results.</i>—This work is making satisfactory progress, and a part of it is nearing completion. It has an important bearing upon the major cotton breeding projects, to which it is in a measure incidental. The work has served to arouse a great interest among cotton growers in the systematic breeding and selection of cotton.</p> <p>(11) Miscellaneous cotton investigations in Tennessee and Arkansas (S. M. Bain, special agent). This work includes tests of the effect of altitude on cotton and of the effect of treating cotton ovules with chemical solutions in the effort to induce variation; also an investigation of the oil content of cotton, including the devising of methods of producing varieties of cotton richer in oil, and the testing of the influence of increased oil content of the seed on the characters of earliness, vigor, and productiveness in the resulting plants. 1,500.00</p> <p><i>Results.</i>—The investigation of oil content is nearing completion. It has been found that the variation in oil in different varieties is not as great as the variation in yield, so that the best way is to breed for productiveness first and then select for oil content. Satisfactory progress is being made in the studies of altitude and chemical treatment, but it is yet too early to state definite results. Seed of chemically treated ovules will be secured for planting next year.</p>	<p>(8) Cooperative cotton breeding work in Georgia..... \$1,925.00</p> <p>(9) Breeding cottons adapted to South Carolina and Mississippi..... 2,733.34</p> <p>(10) Miscellaneous cotton investigations in South Carolina. 1,084.66</p> <p>(11) Miscellaneous cotton investigations in Tennessee and Arkansas..... 1,000.00</p>	<p>(8) Cooperative cotton breeding work in Georgia..... \$2,450.00</p> <p>(9) Breeding cottons adapted to South Carolina and Mississippi..... 2,733.34</p> <p>(10) Miscellaneous cotton investigations in South Carolina. 1,084.66</p> <p>(11) Miscellaneous cotton investigations in Tennessee and Arkansas..... 1,000.00</p>

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
COTTON-BREEDING INVESTIGATIONS—Continued.	COTTON-BREEDING INVESTIGATIONS—Cont'd.	COTTON-BREEDING INVESTIGATIONS—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(12) Breeding cotton to escape weevil injury (R. L. Bennett, special agent). This work was conducted in cooperation with the Texas Experiment Station. It was completed during the past fiscal year.....		
\$1,500.00		
<i>Results.</i> —A method of breeding to escape weevil injury was devised which is practical for the farmer. A farmers' bulletin was prepared outlining this method, by which every farmer in the weevil-infested territory can breed his cotton so as to escape weevil injury, also improving it at the same time by following the instructions contained in this bulletin.		
CORN INVESTIGATIONS.	CORN INVESTIGATIONS.	CORN INVESTIGATIONS.
(C. P. Hartley, physiologist in charge.)	(C. P. Hartley, physiologist in charge.)	(C. P. Hartley, physiologist in charge.)
Salaries, statutory.....	Salaries, statutory.....	Salaries, statutory.....
Salaries, lump fund.....	Salaries, lump fund.....	Salaries, lump fund.....
Stationery, furniture, supplies, etc.....	Stationery, furniture, supplies, etc.....	Stationery, furniture, supplies, etc.....
Miscellaneous expenses, freight, express, etc.....	Miscellaneous expenses, freight, express, etc.....	Miscellaneous expenses, freight, express, etc.....
Traveling and station and field expenses.....	Traveling and station and field expenses.....	Traveling and station and field expenses.....
Total.....	Total.....	Total.....
PROJECTS.	PROJECTS.	PROJECTS.
(1) Production of improved strains of corn by breeding and selection (Mr. Hartley). This work consists of the breeding of strains of corn by the best known practicable methods, and adapting these strains to localities much in need of good varieties of corn. The strains are being improved especially in the productiveness and in uniformity. The object of the work is to place in the hands of corn producers strains of corn that can be grown with greater profit than those now used, and also to afford demonstrations of the value of seed selection.....	(1) Production of improved strains of corn by breeding and selection.....	(1) Production of improved strains of corn by breeding and selection.....
7,533.54	8,220.73	9,220.73
<i>Results.</i> —It has been possible to take up this work with seventeen strains of corn, the work now being in progress in eleven States. The demonstration and breeding work in these seventeen localities has interested the corn producers in corn improvement and raised the average production of corn per acre 10 and 15 bushels throughout the localities in which the work is conducted. As the result of breeding for higher yielding power several of the strains have made an average annual increase of 6 bushels per acre for periods of five years, so that they are now producing on the same soil and without fertilizers or extra cultivation 30 bushels more per acre than they produced when the work was begun. One strain, which has been under process of improvement on the farm of L. A. Barry, at Oconomowoc, Wis., for three years, yielded 7,200 pounds of solid mature ears per acre this season, a season so cold and wet that most of the corn in that portion of Wisconsin failed to mature.		
Seed of these improved strains has been distributed by the department and sold by farmers cooperating with the department in their production, thus bringing about a marked improvement in quality and yield per acre in the respective localities. The improvement of these strains is largely in cooperation with interested and practical farmers. Those who have assisted with the work for several years are intensely interested and greatly pleased with the corn improvement work the department has accomplished in their localities.		
(2) Encouragement of seed selection and preservation and improved methods of corn culture (Mr. Hartley). This work includes tests and demonstrations of the best general and practical methods of seed-corn selection, fumigation, drying, and preservation, and also the testing of the Williamson method of corn culture, to determine the advisability of dwarfing corn plants, to prevent excessive stalk growth, and to increase grain production. The method of corn culture best suited to climatic conditions and insect pests are being determined, and demonstrations of the profitableness of good selection and preservation of seed corn are being made.....	(2) Encouragement of seed selection and preservation and improved methods of corn culture.....	(2) Encouragement of seed selection and preservation and improved methods of corn culture.....
2,800.00	3,300.00	3,800.00
<i>Results.</i> —Experiments conducted by the department have proved that carefully dried and well-preserved seed will yield from 7 to 18 bushels more per acre than the same seed left to endure corn-rib conditions and that the increase in production is not due to a stronger vitality of seed. Various methods of fumigating, drying, and storing seed corn are being tested.		

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
CORN INVESTIGATIONS—Continued.	CORN INVESTIGATIONS—Continued.	CORN INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(3) Investigations of the effects of heredity and environment on corn (Mr. Hartley). This work has for its objects the determination of the relative merits of rich and poor land for seed-corn production, and includes tests of the effects of pollen from barren stalks and the taking of notes on the effects of environment on the strain. Methods of corn breeding can not be perfected until many problems of heredity and environment are accurately solved, and experiments intended to solve some of these problems have been undertaken. \$800.00	(3) Investigation of the effects of heredity and environment on corn..... \$910.00	(3) Investigation of the effects of heredity and environment on corn..... \$910.00
<i>Results.</i> —It has been shown that the tendency to produce sucker is hereditary and can be controlled by proper methods of seed selection. Also that the pollen produced by a sucker is identical to the pollen of the main stalk to which the sucker is attached. Experiments also show that the various ears of a corn plant similarly pollinated are of equal value for seed.		
(4) Sweet-corn investigations (Mr. Hartley). Experiments are being carried on in cooperation with growers and canners of sweet corn in various sections of the country, in breeding improved strains of sweet corn for canning and table purposes, and also to demonstrate the practicability of large canning companies and growers producing their own seed corn, thus insuring themselves of a supply of seed corn of known purity and quality. In cooperation with the Bureau of Chemistry and several of the state experiment stations, studies are being made regarding the effect of environment upon sweet corn, both as to the chemical composition of the grain, with particular reference to its sugar content, and also the physical character of the plant. Breeding experiments based upon these studies have been started, their objects being to develop strains of corn of increased sugar content and the general improvement of the varieties for the sections in which the work is being conducted. In addition to the breeding experiments numerous varieties are grown in variety test plats every year and accurate notes taken regarding their productivity, adaptability, length of season, and many other characteristics. Cooking tests are also made of the ears to ascertain the comparative flavor and edible qualities of the varieties..... 1,800.00	(4) Sweet-corn investigations 2,000.00	(4) Sweet-corn investigations.... 2,000.00
<i>Results.</i> —It has been demonstrated that with the isolation of the seed plats from all other corn, careful attention to seed selection and proper drying and preservation of the seed, canners and farmers can produce their own supply of sweet-corn seed and make unnecessary the purchasing of large supplies every year. The productivity and uniformity of the varieties, the size and shape of ear, the filling out and depth of grain have been greatly improved. These are qualities of great importance to canners.		
It has also been found that no one section of the country is especially adapted for the production of sweet-corn seed, a claim that has been so frequently made that it was desirable to have the matter thoroughly investigated. The experimental work along this line has shown that in any section in which sweet corn grows to advantage seed of good quality can be produced.		
Results obtained in the cooperative breeding and analytical work show a wide variation in the sugar content of different ears of corn. It has also been found that these characteristics are transmittable to the progeny, and by selecting for seed ears high in per cent of sugar strains of high sugar content are now being developed.		
ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS.	ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS.	ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS.
(T. H. Kearney, physiologist in charge.)	(T. H. Kearney, physiologist in charge.)	(T. H. Kearney, physiologist in charge.)
Salaries, statutory..... \$372.50	Salaries, statutory..... \$700.00	Salaries, statutory..... \$1,000.00
Salaries, lump fund..... 5,812.13	Salaries, lump fund..... 7,000.00	Salaries, lump fund..... 11,000.00
Stationery, furniture, supplies, etc..... 600.00	Stationery, furniture, supplies, etc..... 1,100.00	Stationery, furniture, supplies, etc..... 1,600.00
Miscellaneous expenses, freight, express, etc..... 150.00	Miscellaneous expenses, freight, express, etc..... 211.05	Miscellaneous expenses, freight, express, etc..... 211.05
Traveling and station and field expenses..... 3,100.00	Traveling and station and field expenses..... 3,500.00	Traveling and station and field expenses..... 5,000.00
Total..... 10,034.63	Total..... 11,511.05	Total..... 15,811.05

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (54 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS—Continued.	ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS—Continued.	ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS—Continued.
PROJECTS.	PROJECTS.	PROJECTS.
(1) Ascertaining the alkali resistance of crop plants and investigating the physiology of resistance to alkali. (Mr. Kearney). This work includes field and laboratory experiments with plants grown both in natural alkali soils and in sand and water cultures containing alkali salts, to ascertain the effects of various types of alkali upon the growth, transpiration, and other functions of plants, and to learn which crop plants are best adapted for growth on alkali soils. The object is to be able to recommend to farmers having alkali land such crops as are best adapted to their conditions, and also to be able to select the species that are most promising for further adaptation by breeding. \$2,000.00	(1) Ascertaining the alkali resistance of crop plants and investigating the physiology of resistance to alkali. \$1,524.83	(1) Ascertaining the alkali resistance of crop plants and investigating the physiology of resistance to alkali. \$1,524.83
<i>Results.</i> —These experiments have demonstrated that the following crop plants are decidedly resistant: Sugar beets, cotton, rape, kale, hairy vetch, sweet clover, horse beans, millet, western and slender wheat grasses, brome grass, tall meadow oat grass. The first three are probably the most resistant plants which are extensively grown as field crops. Other species, notably rye and certain meadow grasses, give good indications of alkali resistance, and will be further tested.		
(2) Breeding strains of various field crops which will be resistant to alkali (Mr. Kearney). The object of this work is to secure by breeding resistant strains of field crops, especially of forage plants, which will be adapted for growth in alkali soils, and thus to increase materially the acreage of crops grown under irrigation in the Western States. 4,300.00	(2) Breeding strains of various field crops which will be resistant to alkali. 3,236.22	(2) Breeding strains of various field crops which will be resistant to alkali. 5,236.22
<i>Results.</i> —Good progress is being made (in cooperation with Dr. C. O. Townsend) in increasing by selection the alkali resistance of the sugar beet. Many selections were also made last season of vetches and other leguminous forage plants, millets, forage grasses, wheat, oats, rye, and barley. As rapidly as possible stocks of seed adapted to alkali soil will be secured for distribution.		
(3) Breeding drought-resistant field crops (Mr. Kearney). This comprises experiments with various grasses and other forage plants to ascertain which species and varieties are most resistant to drought and to increase by breeding the resistance of the most promising kinds. The main object is to secure strains of valuable forage plants adapted to growth without irrigation in the Great Plains and other regions where dry farming is practiced. 1,544.22	(3) Breeding drought-resistant field crops. 2,200.00	(3) Breeding drought-resistant field crops. 3,200.00
<i>Results.</i> —In the work on drought resistance, considerable variation has been found in different field crops, even in the same variety. It has been found practicable to increase this character of drought resistance by careful selection. Work in cooperation with the South Dakota Experiment Station has resulted in securing drought-resistant strains of sorghums, millets, alfalfa, brome grass, timothy, and wheat grass. As soon as a sufficient stock of seed has been secured these strains will be distributed in cooperation with the South Dakota Experiment Station.		
(4) Breeding cotton for the arid Southwest (Mr. Kearney). This includes the breeding and selection of imported strains of Egyptian cotton as well as of promising American upland varieties, especially long-staple uplands. The object is to ascertain which types of cotton are best suited to conditions in the Colorado River Valley and adjacent territory, and can be most profitably grown there, and to further improve these varieties by breeding. 1,790.41	(4) Breeding cotton for the arid Southwest. 2,900.00	(4) Breeding cotton for the arid Southwest. 6,900.00
<i>Results.</i> —Rapid progress is being made in acclimatizing the Met Afi variety of Egyptian cotton in this region and a remarkable improvement has taken place in yield and quality over that noted at the outset of the experiments. Fiber 1½ inches long, of great strength and excellent brown color is now obtained and yield tests of the past season gave over 1½ bales per acre. This cotton normally brings at least twice the price paid for upland cottons.		
Some of the improved upland varieties also gave yields of 1½ bales at Yuma. Sufficient acclimatized seed of some of these varieties is now on hand for cooperative experiments in other parts of the Southwest. Arrangements with the Indian Office are being perfected for experimenting with these cottons on some of the reservations in Arizona. It has been demonstrated that the cotton plant is very resistant to alkali, which will make it one of the safest crops for growing under irrigation.		
(5) Ascertaining value of native growth as a soil indicator (Mr. Kearney). The object is to study the natural vegetation on different types of soil in order to ascertain the value of different native plants as indicators of the kind of soil, its moisture-holding capacity, and its adaptability to different crop plants. In other words, to work out an accurate method of classifying virgin lands on the basis of their natural plant covering. 400.00	(5) Ascertaining value of native growth as a soil indicator. 1,950.00	(5) Ascertaining value of native growth as a soil indicator. 1,950.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS—Continued.	ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS—Continued.	ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(5) Ascertaining value of native growth as a soil indicator—Continued. <i>Results.</i> —During the season of 1907 Dr. H. L. Shantz, acting as a special agent of this bureau, made a detailed study of the native growth on the plains of eastern Colorado and obtained striking results in correlating certain types of native growth, with the kinds of soil on which they occur. He also investigated the physiology of native and cultivated plants in relation to meteorological and soil-moisture conditions, obtaining data that will throw light upon the whole problem of drought resistance. Additional data were also obtained in regard to the value of different alkali weeds as indicators of the amount and kind of alkali present in the soil.		
SUGAR BEET INVESTIGATIONS. (C. O. Townsend, pathologist in charge.)	SUGAR BEET INVESTIGATIONS. (C. O. Townsend, pathologist in charge.)	SUGAR BEET INVESTIGATIONS. (C. O. Townsend, pathologist in charge.)
Salaries, statutory.....\$860.00 Salaries, lump fund.....12,428.77 Stationery, furniture, supplies, etc.....1,668.01 Miscellaneous expenses, freight, express, etc.....200.00 Traveling and station and field expenses.....5,494.01 Total.....20,650.79	Salaries, statutory.....\$1,000.00 Salaries, lump fund.....14,420.00 Stationery, furniture, supplies, etc.....2,120.00 Miscellaneous expenses, freight, express, etc.....250.00 Traveling and station and field expenses.....7,500.00 Total.....25,295.00	Salaries, statutory.....\$1,000.00 Salaries, lump fund.....14,420.00 Stationery, furniture, supplies, etc.....2,120.00 Miscellaneous expenses, freight, express, etc.....250.00 Traveling and station and field expenses.....7,500.00 Total.....25,295.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) Production of single-germ sugar beet seed (Doctor Townsend). This work consists of selection and breeding experiments to eliminate multiple-germ seeds and to increase the number of single-germ seeds. The object is to produce beet seeds which will give but one seedling, thus to a great extent eliminating the cost of thinning and consequently the cost of producing beet sugar. The ordinary beet seed contains several germs and when planted five or six seedlings sprout, thus necessitating a great expense in thinning the plants. It is to obviate this necessity that this project has been undertaken.....4,250.79 <i>Results.</i> —Strains of beets have been developed which produce from 50 to 60 per cent of single-germ seed, and the sugar content of the beets from these seeds has been greatly increased. There is every indication that we will finally secure the strain of single-germ seed for which we are working. Each season's work shows an increased percentage of single-germ seeds.	(1) Production of single-germ sugar beet seed.....5,000.00	(1) Production of single-germ sugar beet seed.....5,000.00
(2) Production of alkali and drought resistant strains of sugar beets (Doctor Townsend, in cooperation with Thomas H. Kearney, of the Bureau of Plant Industry). This consists of selection and breeding work to eliminate the beets injured by alkali, and also cultivation, selection, and breeding experiments to produce a strain of beets that will thrive in semiarid regions without irrigation. The objects are to produce beets of good quality and in paying quantities in alkaline soils, and to produce a profitable drought-resistant beet.....1,800.00 <i>Results.</i> —A large number of beets have been secured which show greater resistance to alkali and drought than the general crop, and it is believed that special strains will be secured adapted to semiarid and alkaline locations.	(2) Production of alkali and drought resistant strains of sugar beets.....2,500.00	(2) Production of alkali and drought resistant strains of sugar beets.....2,500.00
(3) Improvement of methods of growing sugar beets (Doctor Townsend). This work includes the study of time and method of preparing the seed bed, width of rows, subsoiling, etc. The objects are to find methods of lessening the cost of growing sugar beets, and at the same time to increase tonnage and improve the quality of the beets produced.....1,600.00 <i>Results.</i> —Best results are obtained when the seed bed is prepared in the fall. Continued cultivation beyond the usual time in midsummer results in an increase of sugar per acre considerably in excess of the extra cost of cultivation. Subsoiling has in some instances given negative results. If this extra work is not necessary the grower should be saved that expense. This can be determined only by carefully planned and executed experiments.	(3) Improvement of methods of growing sugar beets.....2,500.00	(3) Improvement of methods of growing sugar beets.....2,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1232); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
SUGAR BEET INVESTIGATIONS—Continued.	SUGAR BEET INVESTIGATIONS—Continued.	SUGAR BEET INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(4) Improvement of methods of siloing sugar beets (Doctor Townsend). This work includes experiments in siloing sugar beets in different ways and under different conditions, and the careful noting of results. The object is to keep the seed beets perfectly dormant during the winter without either wilting or decaying. Much trouble has been experienced by growers and factory men in siloing beets, and the difficulties we have met in siloing our experimental crops of selected seed have made it especially necessary to determine the best methods of siloing.....	(4) Improvement of methods of siloing sugar beets \$1,800.00	(4) Improvement of methods of siloing sugar beets..... \$1,800.00
<i>Results.</i> —So far the outdoor silo has been found to be distinctly preferable to siloing under a shed. The beets in the silo should be kept as close to the freezing point as possible without allowing the roots to become frosted. The most satisfactory covering for the silo seems to be burlap, and then a layer of soil, with more soil added as the weather becomes colder. Beets should be as nearly ripe as possible before siloing. By the use of these facts we have reduced the loss in silos from about 25 to about 5 per cent. \$1,200.00		
(5) Study of diseases of the sugar beet and allied plants (Doctor Townsend). This work includes the study in the field and in the laboratory of the most important diseases which attack sugar beets, and also of some related diseases which attack other plants. The chief sugar beet diseases under investigation are those known as curly-top and leaf-spot. The objects are to determine the causes of the diseases and to devise methods of controlling them successfully.....	(5) Study of diseases of the sugar beet and allied plants..... 3,500.00	(5) Study of diseases of the sugar beet and allied plants..... 3,500.00
<i>Results.</i> —Curly-top, a disease of sugar beets in the West, does not occur in the same locality two seasons in succession, a very important fact for growers and factories. More than twenty possible causes of curly-top have been investigated, but with negative results. A report to date will be ready for publication soon. The leaf-spot disease, which annually causes an enormous loss in tonnage and sugar content of beets, may be controlled by spraying. Root-rot of the beet may be controlled by the use of air-slaked lime. The beet gall seems to be related to the peach crown gall and allied diseases. 3,000.00		
(6) Selection of sugar beets for increased tonnage and quality (Doctor Townsend). This work includes selection experiments with large sugar beets of good quality, and also includes the growing of large varieties of stock beets rich in sugar. A combination of the large rich sugar beet with the large rich stock beet by means of cross breeding with the object in view of increasing the yield of sugar per acre.....	(6) Selection of sugar beets for increased tonnage and quality..... 1,795.00	(6) Selection of sugar beets for increased tonnage and quality..... 1,795.00
<i>Results.</i> —We have succeeded in producing a stock beet containing 14 per cent sugar. (The average sugar content of sugar beets in the United States last year was 13.04 per cent.) The stock beets averaged more than three times the weight of the sugar beets in the same field. A large number of these beets have been siloed for seed production. 1,400.00		
(7) Selection of sugar beets for early maturity (Doctor Townsend). The object of this work is to obtain beets suitable for short seasons and to lengthen the harvesting season. In some localities it is desirable to have beets maturing earlier than the varieties now in use, and selections with this end in view are being made.....	(7) Selection of sugar beets for early maturity..... 1,500.00	(7) Selection of sugar beets for early maturity..... 1,500.00
<i>Results.</i> —Beets that mature from one to two weeks earlier than the usual crop have been selected and siloed with a view to producing a strain of beets that will mature in the colder sections, and that will enable the growers to begin the harvest at least two weeks earlier than at present. This will also enable the grower to do away with the necessity of pitting or otherwise holding the beets for delivery at loss in weight and extra expense in rehandling. 1,100.00		
(8) Study of the effect of fertilizers on sugar beets (Doctor Townsend). This work includes experiments in the application of fertilizers and fertilizer ingredients at different times, and in different quantities, noting the different soil, climatic and cultural conditions. The object is to find which fertilizers are most valuable in increasing the quantity and improving the quality of the beets.....	(8) Study of the effect of fertilizers on sugar beets..... 1,200.00	(8) Study of the effect of fertilizers on sugar beets..... 1,200.00
<i>Results.</i> —Green fertilizer and stable manure are indispensable to successful sugar-beet growing. Commercial fertilizers under some conditions give good results, for example; one test made this year with 900 pounds of fertilizer per acre showed a clear gain of upward of \$25 per acre above all expenses, that is, cost of material and labor in applying same, and 300 pounds under some conditions produced a clear gain of only \$7 per acre. In some instances commercial fertilizers seem to be of little or no advantage. 800.00		

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
SUGAR BEET INVESTIGATIONS—Continued.	SUGAR BEET INVESTIGATIONS—Continued.	SUGAR BEET INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(9) Investigations of the progress of the beet-sugar industry (Charles F. Saylor, special agent.) This work includes a study of the domestic production of sugar from beets and the securing of general information regarding the development and condition of the industry in the United States.....	(9) Investigations of the progress of the beet-sugar industry.. \$5,500.00	(9) Investigations of the progress of the beet-sugar industry.. \$5,500.00
<i>Results.</i> —A report embodying the results of these investigations is issued annually as a congressional document. From the latest information it would appear that the sugar production of the country for the year just closing will amount to approximately 500,000 short tons. There will be three or more factories in operation than last year. The tonnage of sugar will in all probability approximate from 20,000 to 30,000 more this year than last. Altogether the industry is in a prosperous state.		
TAXONOMIC AND RANGE INVESTIGATIONS.	TAXONOMIC AND RANGE INVESTIGATIONS.	TAXONOMIC AND RANGE INVESTIGATIONS.
(Frederick V. Coville, botanist in charge.)	(Frederick V. Coville, botanist in charge.)	(Frederick V. Coville, botanist in charge.)
Salaries, statutory..... \$7,268.17	Salaries, statutory..... \$4,920.00	Salaries, statutory..... \$4,920.00
Salaries, lump fund..... 14,882.12	Salaries, lump fund..... 14,040.00	Salaries, lump fund..... 14,040.00
Stationery, furniture, supplies, etc..... 2,050.00	Stationery, furniture, supplies, etc..... 1,100.00	Stationery, furniture, supplies, etc..... 1,100.00
Miscellaneous expenses, freight, express, etc..... 205.24	Miscellaneous expenses, freight, express, etc..... 195.00	Miscellaneous expenses, freight, express, etc..... 195.00
Traveling and station and field expenses..... 2,602.04	Traveling and station and field expenses..... 2,550.00	Traveling and station and field expenses..... 2,550.00
Total..... 27,007.57	Total..... 22,805.00	Total..... 22,805.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) General supervisory and office work (Mr. Coville). This includes the general direction of all taxonomic investigations, the carrying on of correspondence, and other details connected with the investigations..	(1) General supervisory and office work..... 2,800.00	(1) General supervisory and office work..... 2,800.00
<i>Results.</i> —The results under this project are reflected in the progress noted hereafter under the various field and laboratory projects.		
(2) Study and improvement of grazing areas in the national forests (Mr. Coville, in cooperation with the Forest Service). This work consists of a study of the life history of the principal forage plants in the national forest ranges and experiments in grazing at different seasons to determine its effect on increase or decrease of forage. The object is the development of some system of grazing whereby the forest grazing lands may be made to carry more stock.....	(2) Study and improvement of grazing areas in the national forests..... 2,540.00	(2) Study and improvement of grazing areas in the national forests..... 2,540.00
<i>Results.</i> —From one of the experiments on which most progress was possible in a single season the indications are that by a system of rotation in grazing by which each area is allowed to reseed itself once in four or five years, the area being pastured after the seed has matured, the stand of natural pasturage can be maintained, and on overgrazed areas increased, without expense and without the loss of any year's crop. Experiments bearing on other problems of range improvement are in progress.		
(3) Preparation of a manual of the American grasses (A. S. Hitchcock, systematic agrostologist). This work consists of the collection, identification, and description of American grasses, with a view to the preparation of a manual containing authentic information regarding the habitat, manner of growth, and useful qualities of each species.....	(3) Preparation of a manual of the American grasses..... 4,875.00	(3) Preparation of a manual of the American grasses..... 4,875.00
<i>Results.</i> —A technical revision of the genus <i>Panicum</i> , one of the largest and most difficult groups of American grasses, has been nearly completed. In response to a request from the office of Seed and Plant Introduction an account of the grasses of Siberia was prepared for the use of their agricultural explorers. The same office has submitted for critical examination the large collection of grasses brought from foreign countries by these explorers.		
(4) Economic collections of specimens of cultivated plants (W. F. Wight, assistant botanist). This work includes the collection and identification of cultivated or useful plants, especially such as are being introduced by the department from foreign countries. The objects are to aid in the work of plant introduction and also to preserve for reference and study authentic and correctly named specimens of all cultivated plants.....	(4) Economic collections of specimens of cultivated plants.. 7,270.00	(4) Economic collections of specimens of cultivated plants.. 7,270.00
<i>Results.</i> —Of the plants offered for sale by nurserymen and seedsmen an unnecessarily large percentage are incorrectly named. Purchasers are misled and the progress of agriculture and horticulture suffers. The work on the Economic Herbarium, where critical botanical studies of these plants is carried on, has been of great assistance to both purchaser and dealer, often obviating serious losses.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
TAXONOMIC AND RANGE INVESTIGATIONS—Continued.	TAXONOMIC AND RANGE INVESTIGATIONS—Continued.	TAXONOMIC AND RANGE INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(5) Preparation for publication of notes of Dr. Edward Palmer on economic plants (W. E. Safford, assistant curator). This work has for its objects the embodiment in a publication of the store of valuable information regarding the identity, production, preparation, and uses of American plants contained in the notes made by Doctor Palmer during the past five years in the western United States, Mexico, and South America. Full information as to the commercial importance of these plants at the present time will also form a part of the publication..... \$2,000.00 <i>Results.</i> —Good progress has been made toward the completion of the work.	(5) Preparation for publication of notes of Dr. Edward Palmer on economic plants..... \$1,900.00	(5) Preparation for publication of notes of Dr. Edward Palmer on economic plants..... \$1,900.00
(6) Preparation of a catalogue of the literature of botany (Mr. Coville). This work consists of the cataloguing and making available to botanical workers in all lines, of botanical books and periodicals, with special reference to the preparation of a catalogue of the botanical works to be found in all of the libraries in Washington, D. C. The object is to provide increased facilities for access to literature in botanical investigations..... 2,500.00 <i>Results.</i> —Before this catalogue was undertaken there was much unnecessary duplication in the purchase of botanical books in the various government libraries in Washington, and many rare but important works needed by botanical investigators and not supposed to be in the city were in fact here. The catalogue is an inestimable saving of time to men engaged in research and adds greatly to the efficiency of their work.	(6) Preparation of catalogue of the literature of botany..... 2,300.00	(6) Preparation of a catalogue of the literature of botany.... 2,300.00
(7) Preparation of a manual of the flora of Alaska (Mr. Coville). The object of this work is to make available useful information on the plants of Alaska and the agricultural possibilities of that region..... 1,507.57 <i>Results.</i> —The manuscript is nearly completed.	(7) Preparation of a manual of the flora of Alaska..... 1,120.00	(7) Preparation of a manual of the flora of Alaska..... 1,120.00
(8) Care of botanical laboratories..... 2,500.00		
NOTE.—This work included the maintenance of laboratories for botanical work. The expenses thus incurred have been transferred to another fund.		
ARLINGTON EXPERIMENTAL FARM AND TRUCK CROP INVESTIGATIONS.	ARLINGTON EXPERIMENTAL FARM AND TRUCK CROP INVESTIGATIONS.	ARLINGTON EXPERIMENTAL FARM AND TRUCK CROP INVESTIGATIONS.
(L. C. Corbett, horticulturist in charge.)	(L. C. Corbett, horticulturist in charge.)	(L. C. Corbett, horticulturist in charge.)
Salaries, statutory..... \$6,769.58	Salaries, statutory..... \$7,180.00	Salaries, statutory..... \$8,500.00
Salaries, lump fund..... 19,775.70	Salaries, lump fund..... 27,500.00	Salaries, lump fund..... 28,500.00
Stationery, furniture, supplies, etc..... 8,189.58	Stationery, furniture, supplies, etc..... 8,875.00	Stationery, furniture, supplies, etc..... 9,500.00
Miscellaneous expenses, freight, express, etc..... 100.00	Miscellaneous expenses, freight, express, etc..... 200.00	Miscellaneous expenses, freight, express, etc..... 200.00
Traveling and station and field expenses..... 2,874.47	Traveling and station and field expenses..... 4,000.00	Traveling and station and field expenses..... 6,055.00
Total..... 37,709.33	Total..... 47,755.00	Total..... 52,755.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) Arlington (Va.) Experimental Farm (Professor Corbett). This farm consists of 500 acres, and is the field laboratory for the various bureaus and offices of the department. It is equipped with buildings, teams, tools, etc., for carrying on experiments. The object of the farm is to provide horticultural collections which will aid investigators of the department, as well as to afford opportunity for field experiments with plants adapted to this latitude..... 22,434.33 <i>Results.</i> —The development of the farm has demonstrated the improvement possible in the lands of the coastal plain of the United States, and has provided a place within easy reach of Washington, D. C., where investigators can carry on field research. It is impossible to carry on trials, cultural tests, selection, and breeding work without full control of the areas devoted to the work. This is afforded at Arlington.	(1) Arlington (Va.) Experimental Farm..... 22,455.00	(1) Arlington (Va.) Experimental Farm..... 22,455.00
(2) Study of the conditions favoring the forcing of plants (Professor Corbett). This work consists of careful studies of the quantitative relations existing between the rate of growth, periodicity of growth, and transpiration in various economic plants, with a view to using plants as interpreters of climatic conditions in the open, as well as to determine the adaptability of plants to various environments. The main object is to secure definite information on the quantitative relations existing between heat, light, and moisture in the growth of economic plants, and to determine the conditions of environment which should be maintained by commercial florists to secure a maximum development in the various crops grown under glass.. 3,000.00	(2) Study of the conditions favoring the forcing of plants.... 3,000.00	(2) Study of the conditions favoring the forcing of plants.... 3,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
ARLINGTON EXPERIMENTAL FARM AND TRUCK CROP INVESTIGATIONS—Continued.	ARLINGTON EXPERIMENTAL FARM AND TRUCK CROP INVESTIGATIONS—Continued.	ARLINGTON EXPERIMENTAL FARM AND TRUCK CROP INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p><i>Results.</i>—This work has not yet been pursued far enough to make authoritative statement. The indications are that the adaptation of plants to severe winter conditions or to trying arid conditions can be foretold by laboratory studies.</p> <p>The indications are that by the use of flowering wood for propagating purposes, the yield of flowers from greenhouse roses can be materially increased.</p> <p>We are led to believe that the profits from carnations can be decidedly increased by using only plants producing a large number of flowers as mother plants.</p> <p>(3) Truck-crop survey (Professor Corbett). This work consists of special studies of the distribution, season of maturity, time of planting, and methods of marketing cabbage, celery, onions, potatoes, and other truck crops. The objects are the collection of data giving the acreage planted, the time of planting, and the condition of the crops in the various crop zones at stated intervals. This information will aid in recommending the acreage to be planted of any particular crop in any given crop zone. The condition in which various shipments of truck arrive at the markets is also being studied, with a view to the improvement of methods of marketing.</p> <p><i>Results.</i>—The results of this work have enabled us to publish bulletins on tomatoes, cucumbers, beans, celery, strawberries, raspberries, okra, and the home vegetable garden, with bulletins on onions, potatoes, and cabbage in preparation.</p> <p>Maps showing approximate zones for various crops have been compiled.</p> <p>Much data in regard to truck practices, time of planting and harvesting, as well as systems of marketing, has been secured.</p> <p>(4) Demonstrations of truck growing on rice lands (W. R. Beattie, assistant horticulturist). This work is conducted chiefly on the rice lands of South Carolina, where special attention is being given to demonstrations of the possibilities of cultivating onions, cabbage, and celery on the rice lands. The object is to introduce truck growing on these lands, where rice can no longer be produced with profit.</p> <p><i>Results.</i>—It has been shown that many crops can be grown on these lands, but the adaptation of crops and the profitable production of them are totally different propositions, and while we can report success, so far as adaptation of several crops is concerned, there are physical and economic conditions which place this land at a disadvantage in competition with other areas in the production of practically all crops so far tested.</p> <p>(5) Irish-potato trials (Professor Corbett). This work is a continuation of the variety trials inaugurated in 1903 of both European and American varieties of potatoes, and includes the selection of seed potatoes from the most productive hills of standard varieties for the purpose of securing strains of potatoes which will increase the yield per acre in the various potato-growing districts. The work is conducted on the Arlington farm, and also in a number of States, in cooperation with the experiment stations.</p> <p><i>Results.</i>—A bulletin is ready for press on cultivation of Irish potatoes. Information is at hand concerning the comparative value of American and European varieties as regards yield and disease resistance.</p> <p>The results of a 3-year test of 70 varieties in 5 States are now available. This information is to be used for determining the varieties to be made the basis of selection work for the purpose of developing strains especially adapted to the regions and with greater productive power. The average yield of potatoes in this country is far below what it is in European countries and far below what our best growers indicate is possible.</p> <p>(6) Sweet potato investigations (Professor Corbett). This work consists of a comparative study of new and tried varieties of sweet potatoes, as to time and method of planting, time and manner of harvesting and curing, and a study of the changes which take place during the curing and storage periods. Data on the best time for placing the crop upon the market are also being collected. A secondary feature of the work is a study of the possibility of producing a standard stock food from desiccated sweet potatoes.</p> <p><i>Results.</i>—Material has been secured for a bulletin on the cultivation of the sweet potato, together with a description of types and varieties.</p> <p>The value of the sweet potato as a source of alcohol and stock food for the Southern States being determined.</p> <p>(7) Peanut investigations (W. R. Beattie, assistant horticulturist). The objects of this work are to encourage the growing of peanuts as food both for man and for live stock. Extensive varietal plantings are made,</p>	<p>(3) Truck-crop survey..... \$5,500.00</p> <p>(4) Demonstrations of truck growing on rice lands..... 3,500.00</p> <p>(5) Irish-potato trials..... 1,500.00</p> <p>(6) Sweet potato investigations... 1,500.00</p> <p>(7) Peanut investigations..... 1,200.00</p>	<p>(3) Truck-crop survey..... \$7,000.00</p> <p>(4) Demonstrations of truck growing on rice lands..... 4,000.00</p> <p>(5) Irish-potato trials..... 2,000.00</p> <p>(6) Sweet potato investigations... 2,000.00</p> <p>(7) Peanut investigations..... 1,500.00</p>

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
ARLINGTON EXPERIMENTAL FARM AND TRUCK CROP INVESTIGATIONS—Continued.	ARLINGTON EXPERIMENTAL FARM AND TRUCK CROP INVESTIGATIONS—Continued.	ARLINGTON EXPERIMENTAL FARM AND TRUCK CROP INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
and a careful study of the industry is under way, with the idea of introducing improved machinery for the purpose of lessening the cost of producing the crop. Special attention is being given to the extension of this industry into the cotton States, with a view to the development in that region of a crop which will be the means of maintaining live stock. Some attention is also being given to the production of peanut oil.....		
Results.—Data for a bulletin on the culture, harvesting, and marketing of peanuts are at hand.		
The extension of the cultivation of the crop is going on rapidly and the indications are that the crop is to play an important part in the farm practice of the Southwest, in the way of a stock food. This plant is the only one known which produces a perfectly balanced ration for a dairy cow.		
The value and importance of this crop justify large expenditures for its encouragement through the Southern States.		
(8) Onion investigations (Professor Corbett). This work is conducted under two divisions: (a) Bermuda onion growing in Southwest United States for development and extension of the industry, and the improvement of the seed supply; (b) onion growing in the North Atlantic and Lake States, covering seed and set production—cultural methods, storing and marketing for the purpose of improving and extending the industry.....	(8) Onion investigations..... \$1,000.00	(8) Onion investigations..... \$1,200.00
Results.—Material has been gathered which forms a new chapter in the literature of onion growing—the production of onion sets.		
Cultural directions for the production of Bermuda onions in the Southwest can now be supplied as soon as it can be made ready for publication. This is a new industry but one of great value to the territory in which it can be conducted.		
(9) Miscellaneous horticultural investigations (Professor Corbett). These include demonstration work in horticulture in the boll-weevil districts, in cooperation with other offices of the bureau; the carrying on of school-garden work, in cooperation with school authorities throughout the country, to stimulate a love for nature in every school child in America, and to provide every man with some knowledge of the plants upon which he is dependent for his existence; and a study of the field practices of the commercial growers of flower and vegetable seeds, to stimulate a greater interest on the part of truck growers in the production of special strains of their crops.....	(9) Miscellaneous horticultural investigations..... 3,100.00	(9) Miscellaneous horticultural investigations..... 4,600.00
Results.—Demonstration work in horticulture is the work of carrying the gospel of a good garden and beautiful grounds to every farmer and householder of America, by planning his garden and grounds and suggesting the plants to be grown. Bulletins bearing on this work are The Home Fruit Garden, The Home Vegetable Garden, The Beautifying of Home Grounds, Annual Flowering Plants, and The Lawn.		
The great demand for this class of information, if it is to be given, will require additional assistance and larger expenditures than are at present possible.		
More than 10,000 school gardens were the result of last season's seed distribution, through this office alone.		
The work stimulates an interest in horticultural pursuits, develops a respect and love for flowers and plants, and for beautiful surroundings; besides being of the greatest assistance to teachers as a means of making dull subjects real live problems. The growing demand for information and seeds for the work indicates its value and popularity.		
A bulletin, The School Garden, helps materially in the work, which is deserving of greater support and more attention than is at present possible.		
Commercial production of flower and vegetable seed: At present our horticultural literature is silent on the ways of seed growers. We need information concerning these practices and better seeds for special purposes, some of which are covered in particular problems, such as better cabbages, improved tomatoes for canning, and more productive potatoes, beans, and peas.		
NOTE.—During the fiscal year 1908 the work of vegetable testing was conducted in connection with the congressional distribution of vegetable and flower seeds. (See "Seed distribution," post.)	(10) Vegetable testing (W. W. Tracy, sr., superintendent). This work has for its object the definition and classification of varietal differences in garden vegetables, both as to those in common use and newer stocks introduced by seedsmen, the aim being to so define and classify them	(10) Vegetable testing..... 5,000.00

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
ARLINGTON EXPERIMENTAL FARM AND TRUCK CROP INVESTIGATIONS—Continued.	ARLINGTON EXPERIMENTAL FARM AND TRUCK CROP INVESTIGATIONS—Continued.	ARLINGTON EXPERIMENTAL FARM AND TRUCK CROP INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
	as to prevent the duplication of varietal names and to secure greater uniformity as to the exact variation any given name shall stand for. An effort is also being made to ascertain how far the character of garden vegetables is influenced by location where the seed from which they are produced was grown; also to ascertain by trial the character of the commercial seeds offered and purchased for congressional distribution. Some incidental work is being carried on in the improvement of garden vegetables by selection, chief attention being devoted to peas, beans, tomatoes, and sweet corn.....	
	\$5,000.00	
	Results.—Variety trials and descriptive notes have been made of a general collection of garden vegetables, including samples of all obtainable novelties and new stocks. The collections of radish and garden beet were especially full and complete. The results of similar exhaustive trials of garden beans made during the past five years have been collected and condensed into the form of a bulletin giving full description of all of the distinct varieties of garden beans offered by American seedsmen.	
	A number of the larger trial grounds of seedsmen and those at different experiment stations, as well as locations where truck crops were largely grown, were visited, and notes of the results obtained at these places were made for comparison with those secured at Arlington. The work of devising forms through the use of which comparable variety notes could be made by different observers in different locations has been continued and material progress made. The work of the development of pure stocks of seed of true varietal type for use in the production of seed for congressional distribution has been continued and progress made.	
POMOLOGICAL COLLECTIONS.	POMOLOGICAL COLLECTIONS.	POMOLOGICAL COLLECTIONS.
(G. B. Brackett, pomologist in charge.)	(G. B. Brackett, pomologist in charge.)	(G. B. Brackett, pomologist in charge.)
Salaries, statutory.....	\$10,292.50	\$10,040.00
Salaries, lump-fund.....	6,299.50	6,350.00
Stationery, furniture, supplies, etc.....	466.67	500.00
Miscellaneous expenses, freight, express, etc.....	75.00	75.00
Traveling and station and field expenses.....	69.35	78.68
Total.....	17,203.02	17,043.68
PROJECTS.	PROJECTS.	PROJECTS.
(1) Collection and dissemination of information relating to the fruit industry (Mr. Brackett). This work consists of the securing, by correspondence and otherwise, of data as to the culture and care of orchards and the selection of varieties. The object is the general dissemination of knowledge on the various subjects pertaining to fruit culture.....	(1) Collection and dissemination of information relating to the fruit industry.....	(1) Collection and dissemination of information relating to the fruit industry.....
Results.—It has been possible to give advice to correspondents and others on the selection of orchard sites, the varieties most likely to succeed in their sections, and all other matters relating to the culture of orchard and other fruits.	3,043.68	3,043.68

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
POMOLOGICAL COLLECTIONS—Continued.	POMOLOGICAL COLLECTIONS—Continued.	POMOLOGICAL COLLECTIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(2) Identification and description of fruits (W. N. Irwin, clerk and assistant). This work consists of the identification of samples of fruits submitted by correspondents, the state experiment stations, and others, and the furnishing of detailed descriptions of the different commercial varieties of fruits. The object is to aid fruit growers in establishing the identity of the varieties grown by them wherever there may be any doubt as to the identity of varieties. \$3,000.00 <i>Results.</i> —A great number of samples of fruit varieties have been examined, identified, and described, and much valuable information has been collected and disseminated by means of this work.	(2) Identification and description of fruits. \$3,000.00	(2) Identification and description of fruits. \$3,000.00
(3) Simplification and purification of fruit nomenclature (W. H. Ragan, expert in pomological nomenclature). The objects of this work are to prevent the losses experienced by orchardists through the use of different names for the same variety in various parts of the country, and to aid in the establishment of fruit culture and nursery work on a stable basis as to its terminology. This work is the necessary basis of systematic pomology. 4,000.00 <i>Results.</i> —A great deal has been done toward the revision and simplification of several classes of fruits, notably the apple. A bulletin published on the Nomenclature of the Apple is now used by many persons as the basis for work on this fruit, and data have been collected which will make it possible to publish similar bulletins on the other principal orchard fruits.	(3) Simplification and purification of fruit nomenclature. 4,000.00	(3) Simplification and purification of fruit nomenclature. 4,000.00
(4) Modeling and painting of fruits (Deborah G. Passmore, Ellen I. Schutt, and Amanda A. Newton, clerks and artists). This work is conducted in accordance with the legal authority given the bureau to model and paint fruits and furnish duplicate models to the state experiment stations and others. The objects of the work are to preserve an authentic collection of models and paintings of fruit varieties, for use in illustrating publications and in all of the fruit work of the bureau. 4,000.00 <i>Results.</i> —Many reproductions of fruits, especially rare and little-known varieties, by means of wax and water colors, have been made, and duplicate models have been furnished to the state experiment stations and others interested in orchard work. These reproductions have assisted in the straightening of nomenclature, the illustrating of publications, and other phases of the work.	(4) Modeling and painting of fruits. 4,000.00	(4) Modeling and painting of fruits. 4,000.00
(5) Cooperative experimental orchard on the Arlington Farm (Mr. Brackett, in cooperation with L. C. Corbett, horticulturist in charge of the Arlington Experimental Farm). The objects of this orchard are to establish the identity of varieties and to disseminate scions of valuable sorts. An apple orchard of 18 acres, a peach orchard of 7 acres, and a small area of figs and nursery stock have been planted. 3,000.00 <i>Results.</i> —Nearly 600 varieties of fruits are now on trial on the testing grounds, and it has been possible by means of this experimental orchard to clear up the identity of a number of sorts and to advise fruit growers as to the best varieties to plant. A number of scions of varieties found especially desirable have been distributed to growers for trial.	(5) Cooperative experimental orchard on the Arlington Farm. 3,000.00	(5) Cooperative experimental orchard on the Arlington Farm. 3,000.00
FIELD INVESTIGATIONS IN POMOLOGY.	FIELD INVESTIGATIONS IN POMOLOGY.	FIELD INVESTIGATIONS IN POMOLOGY.
(William A. Taylor and G. Harold Powell, pomologists in charge.)	(William A. Taylor and G. Harold Powell, pomologists in charge.)	(William A. Taylor and G. Harold Powell, pomologists in charge.)
Salaries, statutory. \$4,280.00 Salaries, lump fund. 27,862.41 Stationery, furniture, supplies, etc. 9,200.00 Miscellaneous expenses, freight, express, etc. 612.15 Traveling and station and field expenses. 14,108.93 Total. 56,063.49	Salaries, statutory. \$4,800.00 Salaries, lump fund. 30,000.00 Stationery, furniture, supplies, etc. 12,000.00 Miscellaneous expenses, freight, express, etc. 706.28 Traveling and station and field expenses. 18,000.00 Total. 65,506.28	Salaries, statutory. \$4,800.00 Salaries, lump fund. 32,000.00 Stationery, furniture, supplies, etc. 14,000.00 Miscellaneous expenses, freight, express, etc. 706.28 Traveling and station and field expenses. 19,000.00 Total. 70,506.28
PROJECTS.	PROJECTS.	PROJECTS.
(1) Experimental export shipments of fruits (Mr. Taylor). This work consists of experimental shipments of various fruits, especially summer and winter apples, peaches, pomeloes, and pineapples, to foreign countries with a view to the development of an export trade and the determination of the keeping qualities of different fruits in ocean transit. An effort is being made to ascertain the relation of varieties, packages, methods of packing, etc., to the requirements of long-distance shipment. 4,200.00 <i>Results.</i> —Work along this line has been restricted to investigations of the conditions under which the fruits in question are grown, harvested, and prepared for ship-	(1) Experimental export shipments of fruits. 6,000.00	(1) Experimental export shipments of fruits. 7,000.00

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
FIELD INVESTIGATIONS IN POMOLOGY—Continued.	FIELD INVESTIGATIONS IN POMOLOGY—Con.	FIELD INVESTIGATIONS IN POMOLOGY—Con.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>ment. Experimental shipments of southern fruits are expected to be resumed in the spring of 1909. The importance of determining the best methods of exporting surplus fruits in years of full crops becomes annually more evident, and fruit growers show increasing interest in the work. More exact data regarding conditions in foreign markets are much needed. The European demand for American pears continues excellent, and considerable shipments of oranges to the British markets have been made.</p> <p>(2) Improvement of methods of packing and handling winter apples (Mr. Taylor). This work is conducted in the eastern apple districts in connection with both domestic and export shipment, the object being to improve the carrying quality, durability, attractiveness, and wholesomeness of market fruits, through the correction of errors in present methods... \$4,500.00</p> <p><i>Results.</i>—Apple-packing tests under careful observation have shown that with the methods generally practiced a considerable proportion of the losses of apples in transit are traceable to the orchard and packing operations. While foreign demand for American apples continues strong, lack of uniformity in size of package and entire lack of uniformity in grade standards is operating against the market reputation of the apples of the United States in foreign markets in contrast with the uniformly graded and branded fruit of Canada which is subject to government inspection.</p> <p>(3) Improvement of methods of packing and shipping California oranges and deciduous fruits (Mr. Powell). This work includes studies of the decay of oranges in the packing house and in transit; of the condition on arrival of transcontinental shipments of citrus fruits; of the keeping quality in the market of fruit handled and shipped under different conditions; and technical studies of temperature changes in fruit in refrigerator cars in transit, as well as engineering studies of methods of cooling fruit for shipment... 18,000.00</p> <p><i>Results.</i>—The losses from decay in citrus fruit while in transit were estimated to vary from $\frac{1}{2}$ to $1\frac{1}{2}$ million dollars where this work was undertaken. The decays were found to result from improper methods of handling the fruit in the groves and packing houses, causing it to be bruised and thereby made susceptible to rot. It was due also to lack of fumigation in groves and to the slow cooling of the fruit in the cars. As a result of the work so far accomplished, the methods of labor and the packing-house equipment and methods have been modified and simplified. There has been a greater fumigation of groves, and the transcontinental railroads are building plants in which to cool the fruit in hot weather before shipment. It is estimated by shippers in California that this work is worth at least a million dollars annually to the industry.</p> <p>A similar line of work is in progress with deciduous fruits, but has not progressed far enough for practical results.</p> <p>(4) Improvements in transportation of Florida oranges (Mr. Powell). This work is practically similar to that under way with California oranges, but is of more recent undertaking. It consists of a preliminary investigation of the mechanical handling of the fruit, and of conditions in transit and in storage.... 7,593.49</p> <p><i>Results.</i>—The losses from decay in oranges while in transit from Florida are relatively heavier than in California fruit. At present the work consists in determining how much injury results to the fruit in the various operations of handling, and the amount of decay developing in fruit handled under various commercial conditions. The work has not progressed far enough to show practical results, except that the shippers and growers are generally adopting the better methods of handling worked out in the California investigations.</p> <p>(5) Improvement of fruit-storage methods (Mr. Powell). This work is being conducted in several States, having for its object the determination of the principles that govern the successful cold storage of perishable fruits. Some attention is also being given to the farm storage house problem, with a view to the development of practical methods of storing fruit on the farm.... 5,000.00</p> <p><i>Results.</i>—The storage work has resulted in a more careful handling of fruits, in the quicker storage after harvesting, in the use of lower temperatures, and a knowledge of the principles that govern the handling of fruits for storage. This information was developed in these investigations.</p>	<p>(2) Improvement of methods of packing and handling winter apples..... \$6,000.00</p> <p>(3) Improvement of methods of packing and shipping California oranges and deciduous fruits..... 20,000.00</p> <p>(4) Improvements in transportation of Florida oranges..... 8,000.00</p> <p>(5) Improvement of fruit-storage methods..... 6,000.00</p>	<p>(2) Improvement of methods of packing and handling winter apples..... \$6,000.00</p> <p>(3) Improvement of methods of packing and shipping California oranges and deciduous fruits..... 22,000.00</p> <p>(4) Improvements in transportation of Florida oranges..... 9,000.00</p> <p>(5) Improvement of fruit-storage methods..... 7,000.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
FIELD INVESTIGATIONS IN POMOLOGY—Continued.	FIELD INVESTIGATIONS IN POMOLOGY—Con.	FIELD INVESTIGATIONS IN POMOLOGY—Con.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>(6) Development of phylloxera-resistant grape stocks and determination of their congeniality to Vinifera varieties (George C. Husmann, pomologist). This work is being conducted chiefly on the Pacific slope in regions invested by phylloxera. Experiments in the grafting of Vinifera varieties on resistant stocks are a part of the work, and a number of experimental vineyards are being conducted in cooperation with Pacific coast grape growers.....</p> <p><i>Results.</i>—Our experiments show that to successfully establish a vineyard on resistant stock, while it is imperative that stocks be selected that are suited to the soil and climatic conditions, it is not less important that stocks be selected with reference to their congeniality to the varieties it is desired to graft on them. Experiments in grafting Vinifera varieties on different resistant stocks show the important fact that many of the leading commercially grown varieties which are being so largely planted for diverse purposes, although on resistant stocks, will not prove successful because the stocks they are on are not congenial to them, even though such stocks may be well suited to the soil conditions in which they are to be placed. They also show that a Vinifera variety grafted on different stocks may be sweeter on one, have relatively more acid on another, ripen earlier on some than others, be more productive on one stock than another; in fact, may succeed well on one stock and fail on another.</p> <p>Our experiments show that the standards of phylloxera resistance established by the French viticulturists are only partially applicable in this country. American standards of resistance must be formulated.</p> <p>Our investigations show conclusively that the varieties of resistant stocks, which for lack of information along this line, are being generally used by the growers in the commercial vineyards of California, will fail in more instances than they will succeed, their successes being limited to the vineyards where the soil and climatic conditions are suited to them. The department's tests in its experimental vineyards, of all promising resistant stocks, the majority of which have never been tried in this country, are already giving striking results and are destined to show just which stock or stocks should be used on each of the different soils and under the varying climatic conditions. On the proper adjustment of resistant stocks to these conditions more than any other one thing depends the future of the Vinifera grape industry.</p>	<p>(6) Development of phylloxera-resistant grape stocks and determination of their congeniality to Vinifera varieties.....</p> <p>\$5,000.00</p>	<p>(6) Development of phylloxera-resistant grape stocks and determination of their congeniality to Vinifera varieties.....</p> <p>\$5,000.00</p>
<p><i>Results.</i>—Our experiments show that to successfully establish a vineyard on resistant stock, while it is imperative that stocks be selected that are suited to the soil and climatic conditions, it is not less important that stocks be selected with reference to their congeniality to the varieties it is desired to graft on them. Experiments in grafting Vinifera varieties on different resistant stocks show the important fact that many of the leading commercially grown varieties which are being so largely planted for diverse purposes, although on resistant stocks, will not prove successful because the stocks they are on are not congenial to them, even though such stocks may be well suited to the soil conditions in which they are to be placed. They also show that a Vinifera variety grafted on different stocks may be sweeter on one, have relatively more acid on another, ripen earlier on some than others, be more productive on one stock than another; in fact, may succeed well on one stock and fail on another.</p> <p>Our experiments show that the standards of phylloxera resistance established by the French viticulturists are only partially applicable in this country. American standards of resistance must be formulated.</p> <p>Our investigations show conclusively that the varieties of resistant stocks, which for lack of information along this line, are being generally used by the growers in the commercial vineyards of California, will fail in more instances than they will succeed, their successes being limited to the vineyards where the soil and climatic conditions are suited to them. The department's tests in its experimental vineyards, of all promising resistant stocks, the majority of which have never been tried in this country, are already giving striking results and are destined to show just which stock or stocks should be used on each of the different soils and under the varying climatic conditions. On the proper adjustment of resistant stocks to these conditions more than any other one thing depends the future of the Vinifera grape industry.</p>		
<p>(7) Vinifera grape investigations (George C. Husmann, pomologist). This work includes tests of the adaptability of Vinifera varieties to different sections and conditions, with a view to recommending their culture in regions giving promise of success. The adaptability of Vinifera table grapes to culture on resistant stocks in the Southeastern States is receiving some attention.....</p> <p><i>Results.</i>—To give encouragement to Vinifera grape culture in those sections of the country where it is considered Viniferas could be successfully and commercially grown, the past season, as in previous ones, distributions of cuttings and vines for testing purposes have been made to agricultural experiment stations, reservations, private growers, and investigators and instruction given them through correspondence, personal visits, etc. Reports received from such parties and personal observations made show substantial progress.</p>	<p>(7) Vinifera grape investigations. 3,300.00</p>	<p>(7) Vinifera grape investigations. 5,000.00</p>
<p>(8) Rotundifolia grape investigations (George C. Husmann, pomologist). This work has for its object the development of Rotundifolia grape culture in the South Atlantic and Gulf States. A study of the soils on which the different varieties thrive best and observations of the Rotundifolia in its native haunts are features of the work. Some attention is also being given to improvements in methods of culture and of training the vine, as well as in methods of marketing and handling the product.....</p> <p><i>Results.</i>—A comprehensive series of experiments in Florida, Georgia, South Carolina, and North Carolina has demonstrated the fact that the leading commercial varieties of this species are not self-fertile and must in fact be pollinized by planting staminate vines in the vineyards unless such vines already exist in the vicinity. Field study of promising varieties and observation of such in vineyard has been continued. Some unfertilized grape-juice experiments from fruit of this species were made. Experiments in methods of propagation have been pursued. The origin of the better and more promising varieties is being ascertained. A study of the present methods of culture, pruning, and training has been made with a view of improving on the same. This species is considered the most promising for the South Atlantic and Gulf States.</p>	<p>(8) Rotundifolia grape investigations..... 2,000.00</p>	<p>(8) Rotundifolia grape investigations..... 2,000.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
FIELD INVESTIGATIONS IN POMOLOGY—Continued.	FIELD INVESTIGATIONS IN POMOLOGY—Con.	FIELD INVESTIGATIONS IN POMOLOGY—Con.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>9) Study of miscellaneous viticultural problems (George C. Husmann, pomologist). These investigations include methods of pruning, trellising, training, and cultivating the vine and the uses of the fruit for different purposes; the giving of information as to the preparation of grape products; a study of the adaptability of grape varieties to culture in different vineyard sections, and other miscellaneous problems. \$1,500.00</p> <p><i>Results.</i>—Closer relations have been established with agricultural colleges, private growers and investigators in various parts of the country. A number of interesting experiments have been made to determine the value of varieties for different purposes, including among them over 800 saccharine and acid tests of Vinifera varieties, fruiting on different resistant stocks.</p> <p>Seed samples and photographs of such varieties have been collected and herbarium specimens, photographs of root systems of a number of resistant varieties and blossoming, growing, and pruning records have been arranged and correlated. A number of grape descriptions have been written and added to those already on hand. Reports on the behavior of varieties have been called for and received from a number of parties in different sections of the country to whom cuttings and plants had been sent and some interesting foreign exchanges have been made. Besides this, progressive problems are being followed up as time and facilities permit. Newly introduced varieties are being tested.</p> <p>(10) Study of the adaptability of apples and other fruits to different sections (H. P. Gould, pomologist in charge). This work consists of a careful study of the conditions of soil, climate, and other factors of influence which exist in different fruit-growing sections and of the behavior of different varieties of fruits under those conditions and their adaptability thereto; also the introduction of new or untried varieties into sections in which they offer promising results. The object is to so determine the influence of conditions upon varieties that in the extension of the fruit-growing interests of the country it will be possible to recommend with reasonable certainty of success the culture of given varieties for particular regions. 2,800.00</p> <p><i>Results.</i>—Three sections have thus far been studied in this way and preliminary reports of results are in the course of preparation.</p> <p>(11) Phenological investigations of fruit culture (H. P. Gould, pomologist in charge). These investigations consist of the recording of observations on the important phenomena of tree growth, such as dates of blossoming, ripening of the fruit, cessation of growth, etc., of fruit trees in various parts of the country. These notes are made with the voluntary cooperation of several hundred fruit growers in the more important fruit sections. Important climatic features of each season are also recorded. The object is to secure accurate data which will make possible the selection of varieties which can wisely be planted together in different sections to insure cross-pollination as a means of increasing fruitfulness; also for correlating the blossoming period of different varieties and other critical epochs in the seasonal growth of fruit trees and the frequent occurrences of injurious climatic conditions, such as late spring frosts in different sections, thus enabling the selection of varieties the critical epochs of which occur at times during which injurious climatic conditions are least likely to occur. 1,565.00</p> <p><i>Results.</i>—This work must be continued several years longer before extensive correlation is warranted, but the data are very frequently used as a source of reference for various purposes.</p> <p>(12) Study of the relative merit and adaptability of pecan varieties (Mr. Taylor). The object of this work is to ascertain the conditions under which pecan culture can be successfully carried on, especially in the South Atlantic and Gulf States, and to determine the varietal adaptability of pecans to the soils and climatic conditions of those regions. A study of the effect of cross-pollination on quantity and quality of the crop is being made. 2,500.00</p> <p><i>Results.</i>—Careful studies of the leading varieties are being made to determine which are best adapted to particular regions and special uses. This phase is of greater economic importance with the pecan than with most fruits or nuts because of the comparatively long period required to bring these trees into bearing and the relatively high cost of transforming bearing trees into new varieties by topgrafting. A comprehensive test of the self-fertility of pecan varieties is planned for the spring of 1909.</p>	<p>(9) Study of miscellaneous viticultural problems. 1,500.00</p> <p>(10) Study of the adaptability of apples and other fruits to different sections. 3,500.00</p> <p>(11) Phenological investigations of fruit culture. 1,500.00</p> <p>(12) Study of the relative merit and adaptability of pecan varieties. 2,706.28</p>	<p>(9) Study of miscellaneous viticultural problems. \$1,500.00</p> <p>(10) Study of the adaptability of apples and other fruits to different sections. 3,500.00</p> <p>(11) Phenological investigations of fruit culture. 1,500.00</p> <p>(12) Study of the relative merit and adaptability of pecan varieties. 2,706.28</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
GREENHOUSES, GARDENS, AND GROUNDS. (E. M. Byrnes, superintendent.)	GREENHOUSES, GARDENS, AND GROUNDS. (E. M. Byrnes, superintendent.)	GREENHOUSES, GARDENS, AND GROUNDS. (E. M. Byrnes, superintendent.)
Salaries, statutory..... \$22,572.45	Salaries, statutory..... \$22,720.00	Salaries, statutory..... \$2,540.00
Salaries, lump fund..... 9,500.41	Salaries, lump fund..... 10,938.00	Salaries, lump fund..... 31,118.00
Stationery, furniture, supplies, etc..... 7,000.00	Stationery, furniture, supplies, etc..... 6,500.00	Stationery, furniture, supplies, etc..... 6,500.00
Miscellaneous expenses, freight, express, etc..... 2,218.15	Miscellaneous expenses, freight, express, etc..... 1,792.50	Miscellaneous expenses, freight, express, etc..... 1,792.50
Total..... 41,291.01	Total..... 41,950.50	Total..... 41,950.50
PROJECTS.	PROJECTS.	PROJECTS.
(1) General care of department grounds. This work includes the ornamentation, making of repairs, and other necessary details connected with the proper care and appearance of the grounds surrounding the department buildings..... 12,591.01	(1) General care of department grounds..... 12,850.50	(1) General care of department grounds..... 12,850.50
(2) Care of greenhouses and collections of plants under glass. This work includes the maintenance of the department greenhouses, and the proper care of the collections of tropical and miscellaneous plants contained therein..... 10,000.00	(2) Care of greenhouses and collections of plants under glass.. 10,000.00	(2) Care of greenhouses and collections of plants under glass.. 10,000.00
(3) Propagation of plants for decorative and other purposes. This work consists of the propagation of various flowering plants for ornamenting the department grounds, for exhibition purposes, and for special distribution..... 9,000.00	(3) Propagation of plants for decorative and other purposes.. 9,000.00	(3) Propagation of plants for decorative and other purposes.. 9,000.00
(4) Repair and construction of greenhouses, etc. This work consists of necessary repairs to the greenhouses and other buildings of the department, and the construction of additional structures needed in connection with the normal growth of the greenhouse work..... 9,700.00	(4) Repair and construction of greenhouses, etc..... 10,100.00	(4) Repair and construction of greenhouses, etc..... 10,100.00
FARM-MANAGEMENT INVESTIGATIONS. (W. J. Spillman, agriculturist in charge.)	FARM-MANAGEMENT INVESTIGATIONS. (W. J. Spillman, agriculturist in charge.)	FARM-MANAGEMENT INVESTIGATIONS. (W. J. Spillman, agriculturist in charge.)
Salaries, statutory..... \$10,703.67	Salaries, statutory..... \$9,040.00	Salaries, statutory..... \$15,120.00
Salaries, lump fund..... 43,493.75	Salaries, lump fund..... 55,000.00	Salaries, lump fund..... 80,000.00
Stationery, furniture, supplies, etc..... 6,700.00	Stationery, furniture, supplies, etc..... 10,900.00	Stationery, furniture, supplies, etc..... 11,614.00
Miscellaneous expenses, freight, express, etc..... 255.72	Miscellaneous expenses, freight, express, etc..... 294.00	Miscellaneous expenses, freight, express, etc..... 500.00
Traveling and station and field expenses..... 21,631.52	Traveling and station and field expenses..... 27,000.00	Traveling and station and field expenses..... 45,000.00
Total..... 82,794.66	Total..... 102,234.00	Total..... 152,234.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) District No. 1, North Carolina, South Carolina, Georgia, and Florida (C. L. Goodrich, expert in charge). The work in the farm-management districts consists of the study of the types of farming prevailing in each district, the types giving the best results, and the relation of the various types to local conditions of soil, climate, markets, labor, etc.; of the cropping systems in vogue on different types; of the relation of individual crops to local conditions, and of the methods used in the production and utilization of individual crops; of the dates when crops may be planted and when they are available for use for different purposes when planted at a particular time; and a detailed study of the systems of management on particular farms on which important problems have been solved. In the boll-weevil districts the work is planned and carried out with special reference to assisting the farmers in meeting the ravages of that pest. Working plans are made for selected farms with a view to rendering them objects of local interest and the means of teaching improved methods by example. In some of the older districts object-lesson farms have been established. We plan the work of these farms and visit them occasionally to see that the plans are properly carried out. Farmers' meetings are held in cooperation with state organizations, and the results of the work are published as obtained..... 2,019.66	(1) District No. 1, North Carolina, South Carolina, Georgia, and Florida (C. L. Goodrich, expert in charge)..... 4,034.00	(1) District No. 1, North Carolina, South Carolina, Georgia, and Florida..... 7,034.00
<i>Results.</i> —A large number of meetings have been held throughout District No. 1, and a great deal of interest in diversified farming has been aroused, especially in dairying, trucking, production of hay, growing of beef cattle, hogs, poultry, and in the use of winter cover crops. The value of producing hay has been demonstrated by the experience of a number of farmers in Georgia who have grown wealthy from this type of farming. Thirty-four working plans for farms have been made in this district during the past year. All of these plans provide for increasing the fertility of the soil and for making the farm profitable.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
FARM-MANAGEMENT INVESTIGATIONS—Continued.	FARM-MANAGEMENT INVESTIGATIONS—Con.	FARM-MANAGEMENT INVESTIGATIONS—Con.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(2) District No. 2, Alabama and Mississippi (M. A. Crosby, assistant agriculturist in charge). The work in this district is similar to that in District No. 1, previously described..... \$4,000.00 <i>Results.</i> —One of the most important results obtained in District No. 2 is a knowledge of the extent of alfalfa soil to be found, especially in Alabama and Mississippi. Two great areas of alfalfa soil have been mapped out. One is the canebrake region extending across the State of Alabama and into the northeastern part of Mississippi; the other consists of delta lands along the Mississippi and its tributaries which grow this crop when properly drained and protected from overflow.	(2) District No. 2, Alabama and Mississippi..... \$6,000.00	(2) District No. 2, Alabama and Mississippi..... \$9,000.00
(3) District No. 3, Louisiana and Arkansas (A. D. McNair, expert in charge). The work in this district is similar to that in District No. 1, previously described.... 4,850.00 <i>Results.</i> —The work in District No. 3 was begun less than three years ago, and there are now six diversification farms in operation. In addition to this, cropping systems have been established on many farms at the request of the owners, and general interest has been aroused, with a strong desire for more information along the lines of diversified farming. More than 40 farmers' meetings have been held in this district in the past eighteen months, under the auspices of state experiment stations in cooperation with this office. Many farm plows are made each year for individual farmers, and in some cases the success of the plow has been such as to attract wide attention. In several cases hay growing has been developed where none was grown before, one man putting up 200 tons of good hay the first year, and without previous experience. During the past two years the procuring of hay and grain from the same crop has been placed on a permanent basis. Practical machines are now in use for separating the grain from the vines. In some cases a baler is operated with the separator, and the vines are baled as they come from the machine, and so far command a better price on the market than the whole vines do.	(3) District No. 3, Louisiana and Arkansas (A. D. McNair).. 6,850.00	(3) District No. 3, Louisiana and Arkansas..... 9,850.00
(4) District No. 4, Texas (B. Youngblood, special agent in charge). The work in this district is similar to that in District No. 1, previously described..... 6,250.00 <i>Results.</i> —In Texas considerable interest has been manifested in diversified farming. Cropping plans have been drawn for a number of farms, and truck growing has been encouraged, especially in the region around Denison. At Dallas the success of alfalfa has been demonstrated, and oats, wheat, and corn have been grown more profitably than cotton. At Temple, cotton returned a net profit of \$35 per acre. At Eastland the value of sorghum and cowpeas as forage crops and of yellow milo as a reliable grain crop has been shown. Studies have been made in various sections of the State, especially the west and northwest portions, now rapidly developing as agricultural districts.	(4) District No. 4, Texas..... 8,250.00	(4) District No. 4, Texas..... 11,250.00
(5) District No. 5, New York and the New England States (L. C. Dodge, assistant agriculturist in charge). The work in this district is similar to that in District No. 1, previously described, with the exception of those lines bearing directly on the boll-weevil problem..... 2,835.00 <i>Results.</i> —In District No. 5 dairying and trucking have been found to be the most profitable types of farming, but profitable fruit, beef, and hog farms have also been found. Poultry, of course, is extensively raised with much profit. An extremely interesting system of farming has been found at Aroostook, Me. The cropping system is potatoes, oats, and clover. Under this system land has acquired a value of \$125 per acre.	(5) District No. 5, New York and the New England States... 4,835.00	(5) District No. 5, New York and the New England States... 6,835.00
(6) District No. 6, Oregon, Washington, and Idaho (Byron Hunter, assistant agriculturist in charge). The work in this district is similar to that in District No. 1, previously described, with the exception of those lines bearing directly on the boll-weevil problem... 4,035.00 <i>Results.</i> —In District No. 6 cropping systems adapted to the regions have been worked out. It has been found possible to grow wheat in this district with less than 12 inches of rainfall. A number of varieties of winter wheat have been found which seem to be adapted to local conditions and make good flour. These results have been published in detail in a bulletin, "Farm Practice in the Columbia Basin." A careful study has been made of the crops grown and methods of feeding practiced by the most successful hog growers that could be found, and material is now ready and a bulletin will be published this winter on the subject	(6) District No. 6, Oregon, Washington, and Idaho..... 6,035.00	(6) District No. 6, Oregon, Washington, and Idaho..... 8,035.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
FARM-MANAGEMENT INVESTIGATIONS—Continued.	FARM-MANAGEMENT INVESTIGATIONS—Con.	FARM-MANAGEMENT INVESTIGATIONS—Con.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(7) District No. 7, Kansas, Nebraska, Iowa, and Missouri (J. A. Warren, assistant agriculturist in charge). The work in this district is similar to that in District No. 1, previously described, with the exception of those lines bearing on the cotton boll weevil problem.....	(7) District No. 7, Kansas, Nebraska, Iowa, and Missouri..... \$3,700.00	(7) District No. 7, Kansas, Nebraska, Iowa, and Missouri..... \$5,700.00
<i>Results.</i> —The crops best adapted to the various soils and rainfall zones of this region have been determined, and a general idea of the types of farming prevailing has been obtained. We find the methods common to new, rich sections. The farming consists largely of grain and hay production, more especially grain. In the eastern part of the district, and in some localities elsewhere, a great deal of stock is raised. Little attention is paid by farmers to definite cropping systems or to methods of keeping the soil fertility up. A bulletin is now being prepared for publication giving the results of some phases of the work thus far accomplished.		
(8) District No. 8, Virginia, Maryland, Delaware, and West Virginia (H. A. Miller, assistant agriculturist in charge). The work in this district is similar to that in District No. 1, previously described, with the exception of those lines bearing directly on the cotton boll weevil problem.....	(8) District No. 8, Virginia, Maryland, Delaware, and West Virginia..... 2,150.00	(8) District No. 8, Virginia, Maryland, Delaware, and West Virginia..... 2,150.00
<i>Results.</i> —A general agricultural survey of this district was made during the past year, and work has begun on the most urgent problems in the peanut, tobacco, and grain sections.		
(9) District No. 9, Kentucky and Tennessee. The work in this district is similar to that in District No. 1, previously described.....	(9) District No. 9, Kentucky and Tennessee..... 1,000.00	(9) District No. 9, Kentucky and Tennessee..... 1,000.00
<i>Results.</i> —The preliminary work has resulted in securing much valuable data which will aid in the inauguration of active work in this district during the present year.		
(10) District No. 10, New Jersey and Pennsylvania. The work in this district is similar to that in District No. 1, previously described, with the exception of those lines bearing directly on the cotton boll weevil problem.....	(10) District No. 10, New Jersey and Pennsylvania..... 1,770.00	(10) District No. 10, New Jersey and Pennsylvania..... 1,770.00
<i>Results.</i> —The preliminary work has resulted in securing much valuable data which will aid in the inauguration of active work in this district during the present year.		
(11) District No. 11, Wisconsin, Michigan, Minnesota, North Dakota, and South Dakota. The work in this district is similar to that in District No. 1, previously described, with the exception of those lines bearing directly on the cotton boll weevil problem.....	(11) District No. 11, Wisconsin, Michigan, Minnesota, North Dakota, and South Dakota..... 4,000.00	(11) District No. 11, Wisconsin, Michigan, Minnesota, North Dakota, and South Dakota..... 4,000.00
<i>Results.</i> —The preliminary work has resulted in securing much valuable data which will aid in the inauguration of active work in this district during the present year.		
(12) District No. 12, New Mexico, Arizona, Utah, Nevada, and western Colorado (David Griffiths, assistant agriculturist in charge). The work in this district is similar to that in District No. 1, previously described, with the exception of those lines bearing directly on the cotton boll weevil problem.....	(12) District No. 12, New Mexico, Arizona, Utah, Nevada, and western Colorado..... 1,200.00	(12) District No. 12, New Mexico, Arizona, Utah, Nevada, and western Colorado..... 1,200.00
<i>Results.</i> —The preliminary work has resulted in securing much valuable data which will aid in the inauguration of active work in this district during the present year.		
(13) Methods of eradicating weeds (J. S. Cates, assistant agriculturist). This work includes a study of the agronomic habits of weeds and of methods of eradicating them in order to secure and disseminate knowledge that will enable farmers to eradicate the most troublesome weeds on their farms. A detailed study of the habits of Johnson grass, nut grass, and other weed pests, and of methods of their extermination, is a feature of this work.....	(13) Methods of eradicating weeds..... 5,300.00	(13) Methods of eradicating weeds..... 8,300.00
<i>Results.</i> —A practical and simple method of controlling Johnson grass has been discovered and is described in Farmers Bulletin No. 279, "A Method of Eradicating Johnson Grass." Since Bulletin No. 279 was published it has developed that the dreaded quack grass can be controlled in much the same way.		
(14) Hay and haymaking (H. B. McClure, assistant agriculturist). This work is a study of farm practices in the production, utilization, and marketing of hay, with the object of improving the quality of hay, cheapening its production, and to encourage hay production in regions which now buy their hay. The relation between weight and volume of hay is being ascertained, as well as the practicability of buying hay in the stack instead of by the ton.....	(14) Hay and haymaking 5,225.00	(14) Hay and haymaking 8,225.00
<i>Results.</i> —A great quantity of data regarding hay production and utilization has been secured which will be of aid in working out improved methods of handling the hay crops.		

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
FARM-MANAGEMENT INVESTIGATIONS—Continued.	FARM-MANAGEMENT INVESTIGATIONS—Con.	FARM-MANAGEMENT INVESTIGATIONS—Con.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(15) Farm practices in the production of forage for beef cattle and sheep (J. S. Cotton, assistant agriculturist). This work consists of the study of farm practices in the production of feed for beef cattle and sheep and in the management of stock of these classes, with the objects of ascertaining and publishing the methods and results secured by the most successful beef and sheep raisers. The conduct of object-lesson farms on which quantities of stock are produced is a feature of this work. \$5,200.00 <i>Results.</i> —Preliminary reports covering the work thus far are on file in this office, and several bulletins are being prepared for publication this winter.	(15) Farm practice in the production of forage for beef cattle and sheep. \$5,200.00	(15) Farm practice in the production of forage for beef cattle and sheep. \$7,200.00
(16) Farm practice in the production of forage for hogs (C. E. Quinn, assistant agriculturist). This is a study of farm practices in the production of feed for hogs and in the management of swine for profit, in order to make known the methods used by the most successful hog raisers. There is a great demand for information along these lines, and object-lesson hog farms are being conducted as a part of the work. . . . 1,800.00 <i>Results.</i> —Bulletin No. 111, Bureau of Plant Industry, Forage Crops for Hogs in Kansas and Oklahoma, has been issued and treats of: (1) What crops have been found best for pasture for hogs in different localities; (2) The season during which these crops are available; (3) The number of stock they will pasture to the acre; (4) The value of this pasture in connection with other feeds; (5) The quantity of grain necessary to produce a given amount of pork on different pastures; (6) The cost of producing pork.	(16) Farm practice in the production of forage for hogs. 3,800.00	(16) Farm practice in the production of forage for hogs. 5,800.00
(17) Study of farm equipment (L. W. Ellis, assistant). This includes a study of the equipment of successful farms in all parts of the country as to buildings, fences, work stock, machinery, and implements. The object is to determine the most satisfactory types of equipment for farms of different types. . . . 2,800.00 <i>Results.</i> —As this work has just begun, no results can be given. However, material has already been gathered which enables us to estimate the necessary equipment and cost of same on a given area in the corn belt.	(17) Study of farm equipment. 2,800.00	(17) Study of farm equipment. 4,800.00
(18) Manures and fertilizers (J. C. Beavers, scientific assistant). This work is a study of farm practices in the production and use of green manures and commercial fertilizers, to obtain knowledge of the methods used by successful farmers, and also of the relation between fertilizers and soil types. A study of commercial fertilizers is being made, and farmers are given advice regarding the use of various fertilizers exploited in their vicinity and their value. 2,500.00 <i>Results.</i> —This work has been unfortunate in its development. Mr. Wilson died before his work was fully established, and his successor, Mr. Allison, was forced to resign on account of ill health, and now Mr. Beavers has begun to organize the work.	(18) Manures and fertilizers. 2,500.00	(18) Manures and fertilizers. 4,500.00
(19) Soiling and silage crops (Lyman Carrier). This includes the study of farm practices in the production and utilization of soiling crops, and also in the construction of silos and the making and using of silage. The object is to ascertain and make public the methods of the most successful farmers. 2,620.00 <i>Results.</i> —Two bulletins have been published during the past year, viz, Cost of Filling Silos and A Profitable Tenant Dairy Farm. This farm yields a net income of 12 per cent on the investment. Two more bulletins are ready for publication, one on the construction of silos and the other on farm practice with soiling crops, in which use of certain green crops among the farmers is detailed.	(19) Soiling and silage crops. 2,620.00	(19) Soiling and silage crops. 4,620.00
(20) Farm practice in corn culture (C. E. Quinn, assistant agriculturist). This consists in a study of farm practices in the cultivation and utilization of corn, with the object of ascertaining and making public the methods used by the most successful farmers in the production of corn. 2,120.00 <i>Results.</i> —This work has not reached a point where it can be published. A large number of lectures have been delivered on this subject during the past year.	(20) Farm practice in corn culture. 2,120.00	(20) Farm practice in corn culture. 4,120.00
(21) Trucking on diversification farms (J. A. Drake, assistant agriculturist). This work includes the supervision of truck growing in the regions where crop diversification is being encouraged and an investigation of the truck industry, which will be of aid in advising farmers who are endeavoring to practice crop rotation or diversification. 2,000.00 <i>Results.</i> —A general survey of the methods used by the truck growers of the Atlantic seaboard has been made with a view to encouraging the growing of suitable truck crops on the diversification.	(21) Trucking on diversification farms. 2,000.00	(21) Trucking on diversification farms. 4,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
FARM-MANAGEMENT INVESTIGATIONS—Continued.	FARM-MANAGEMENT INVESTIGATIONS—Con.	FARM-MANAGEMENT INVESTIGATIONS—Con.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(22) Cassava investigations (S. M. Tracy, special agent). This is a continuation of the study of crops for the Gulf coast region, consisting in the growing of seedling cassavas and the securing of satisfactory varieties which can be grown from seed..... \$1,250.00 <i>Results.</i> —About 75 varieties of cassava have been tested and about 25 have been selected for further investigation. All of these produce seed and yield fully as heavy as plants produced from cutting in the usual way, and yield 15 to 20 tons per acre. The development of those that can be grown from seed will extend the area of the profitable culture of cassava much farther north.	(22) Cassava investigations..... \$1,250.00	(22) Cassava investigations..... \$1,250.00
(23) Study of coarse legumes (M. A. Crosby, assistant agriculturist). This work consists of a study of farm practice in the production and utilization of legumes, to determine the place of leguminous crops in systems of farming, and the use, value, and methods used in the production of crops of this class. <i>Results.</i> —It has been demonstrated that the Canada field pea is admirably adapted to growing in rotation with wheat in the Northwestern States. It is also coming into prominence as a cover crop for orchards and as a soil renovator, in addition to its value as an animal and human food. 1,000.00	(23) Study of coarse legumes..... 1,000.00	(23) Study of coarse legumes..... 3,000.00
(24) Diversification of crops on rice lands. This is a study of farm practices in the cultivation of crops other than rice on the rice lands of the South, with the object of securing a knowledge of the crops that can be profitably grown on rice lands. <i>Results.</i> —It has been shown that when the rice lands are well drained they will grow oats, cowpeas, cotton, sorghum, millet, onions, and grasses. 700.00	(24) Diversification of crops on rice lands..... 700.00	(24) Diversification of crops on rice lands..... 700.00
(25) Study of farm practice in cereal culture and collection of phenological data regarding crop production (H. A. Miller, assistant agriculturist). These lines include the study of farm practices in the cultivation of cereals, to secure information necessary in formulating farm plans, and the collection of data concerning the dates of planting and harvesting crops and the dates when the crops planted at a given time are ready for use for different purposes. <i>Results.</i> —Material enough is now available and will be published in bulletin form during the coming winter. 1,800.00	(25) Study of farm practice in cereal culture and collection of phenological data regarding crop production..... 1,800.00	(25) Study of farm practice in cereal culture and collection of phenological data regarding crop production..... 3,800.00
(26) Miscellaneous studies of farm practices (C. B. Smith, J. A. Drake, and L. G. Dodge, assistant agriculturists). The investigations under this heading include the study of farm practice in commercial seed production, to aid farmers in producing more seeds of better quality and to encourage commercial seed production in section where it appears desirable; a study of the relation of farm practice to soil types, to ascertain the relation of crops and methods of tillage to soil types on areas surveyed by the Bureau of Soils; a study of methods used by the most successful farmers in marketing their products, in order to make available to farmers information that will assist them in marketing their products; a study of farm practice in potato culture, to ascertain and publish the methods used by the most successful potato growers; and a study of farm practices in the use of winter cover crops in the South, to ascertain what crops are most practicable for this purpose and to encourage their more general use. <i>Results.</i> —A bulletin on the subject of clover seed production on the jack pine lands of the Northern States is in preparation. 2,900.00	(26) Miscellaneous studies of farm practices..... 2,900.00	(26) Miscellaneous studies of farm practices..... 5,900.00
(27) Study of business systems in farming (W. A. Peck, assistant agriculturist). This work includes the securing of detailed records of every phase of all types of farms, such as equipment, amount of labor, distribution of labor between crops and live stock, a study of the relation of types of farming to equipment, profit, etc., and a complete cost accounting of all farm operations. <i>Results.</i> —Various forms of blanks have been devised for keeping the records of the operations on different types of farms and these are being used by representative farmers in many parts of the country, and are meeting with great success. 5,880.00	(27) Study of business systems in farming..... 7,319.44	(27) Study of business systems in farming..... 10,319.44
(28) Range investigations (David Griffiths, assistant agriculturist). These investigations cover the study of the care and capacity of the stock ranges of the West and the practices of their management, with a view to ascertaining the best methods of making money out of the ranges, particularly in Arizona, where the native pastures are badly devastated. The work is conducted in cooperation with the owners of the ranges. <i>Results.</i> —Bureau of Plant Industry Bulletin No. 117, The Reseeding of Depleted Range and Native Pastures, has just been issued, giving the results so far attained in this direction. 2,510.00	(28) Range investigations..... 2,510.00	(28) Range investigations..... 4,510.00

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
FARM-MANAGEMENT INVESTIGATIONS—Continued.	FARM-MANAGEMENT INVESTIGATIONS—Con.	FARM-MANAGEMENT INVESTIGATIONS—Con.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(29) Cactus investigations (David Griffiths, assistant agriculturist). These investigations include the planting and cultivation of edible species of cacti, careful observations of their growth, and experiments to determine their feeding value. The value of the prickly pear and other species as food for stock is being studied, and experiments in the improvement of species by selection are also a feature of the work. <i>Results.</i> —The following bulletins have been issued on this work: Bureau of Plant Industry Bulletin No. 74, The Prickly Pear and Other Cacti as Food for Stock. Bureau of Plant Industry Bulletin No. 102, Part I, Summary of Recent Investigations of the Value of Cacti as Stock Food. Bureau of Plant Industry Bulletin No. 116, The Tuna as Food for Man. Bureau of Animal Industry Bulletin No. 91, Feeding Prickly Pear to Stock in Texas.	(29) Cactus investigations..... \$2,640.00	(29) Cactus investigations..... \$2,640.00
\$2,640.00		
(30) Agricultural surveys (Charles A. Hoke, special agent). This year's work under this heading includes a reconnaissance of Oklahoma, to determine the types of farming that prevail in various sections of that State and to acquire a working knowledge of the agricultural possibilities of various sections.....	(30) Agricultural surveys..... 840.00	(30) Agricultural surveys..... 840.00
840.00		
<i>Results.</i> —The report of twelve counties in Oklahoma is now on file in the office. It contains a discussion of the physical features, history, crops grown and cultivation, yield and disposition of each, use of manures, time of planting and harvesting crops, kinds of pastures and meadows, farm equipment, labor, care of soil, etc.		
FARMERS' COOPERATIVE DEMONSTRATION WORK.	FARMERS' COOPERATIVE DEMONSTRATION WORK.	FARMERS' COOPERATIVE DEMONSTRATION WORK.
(S. A. Knapp, special agent in charge.)	(S. A. Knapp, special agent in charge.)	(S. A. Knapp, special agent in charge.)
Salaries, lump fund..... \$59,235.54	Salaries, lump fund..... \$75,000.00	Salaries, statutory..... \$3,000.00
Stationery, furniture, supplies, etc..... 3,000.00	Stationery, furniture, supplies, etc..... 4,000.00	Salaries, lump fund..... 100,000.00
Miscellaneous expenses, freight, express, etc..... 353.08	Miscellaneous expenses, freight, express, etc..... 400.00	Stationery, furniture, supplies, etc..... 6,000.00
Rent..... 597.00	Traveling and station and field expenses..... 24,600.00	Miscellaneous expenses, freight, express, etc..... 500.00
Traveling and station and field expenses..... 16,310.59	Total..... 104,000.00	Traveling and station and field expenses..... 44,500.00
Total..... 79,496.21		Total..... 154,000.00
PROJECT.	PROJECT.	PROJECT.
This work, which was inaugurated in 1904 on a small scale, has for its objects the encouragement of the diversification of crops, the improvement of cultural methods and of systems of farm management, and the general amelioration of farm conditions in the sections invaded by the cotton boll weevil and those in which it would seem that the boll weevil is likely soon to appear. This general propaganda work has met with great and continued success. It is the chief aim simply to bring to the attention of the farmer plain and practical methods of bettering his condition, improving his soil, and growing larger crops. Diversification is taught as far as it can be taught under existing circumstances. The people are reached largely through personal contact with representatives of the department. Close touch is kept with all those who are working in order to determine definitely the difference in actual money returns from farms or portions of farms handled by the old methods or on the newer plans.....	Continuance of work of preceding year, and extension into other parts of the South, notably Oklahoma..... 104,000.00	Continuance of work now under way, and general extension throughout the Southern States..... 154,000.00
79,496.21		
<i>Results.</i> —More than a quarter of a million farmers have been reached through this work during the past year. Farmers' meetings have been held, chiefly on the farms where the results of the adoption of improved methods are apparent. The propaganda work has been so successful that the sum total of voluntary contributions toward its support and extension has almost equaled during the past year the total amount of government funds allotted to the work.		
DRY-LAND AGRICULTURE INVESTIGATIONS.	DRY-LAND AGRICULTURE INVESTIGATIONS.	DRY-LAND AGRICULTURE INVESTIGATIONS.
(E. C. Chilcott, agriculturist in charge.)	(E. C. Chilcott, agriculturist in charge.)	(E. C. Chilcott, agriculturist in charge.)
Salaries, statutory..... \$1,000.00	Salaries, statutory..... \$1,200.00	Salaries, statutory..... \$1,560.00
Salaries, lump fund..... 13,754.66	Salaries, lump fund..... 20,000.00	Salaries, lump fund..... 20,640.00
Stationery, furniture, supplies, etc..... 1,500.00	Stationery, furniture, supplies, etc..... 2,000.00	Stationery, furniture, supplies, etc..... 2,000.00
Miscellaneous expenses, freight, express, etc..... 70.47	Miscellaneous expenses, freight, express, etc..... 76.25	Miscellaneous expenses, freight, express, etc..... 76.25
Traveling and station and field expenses..... 9,103.96	Traveling and station and field expenses..... 9,690.00	Traveling and station and field expenses..... 9,690.00
Total..... 25,429.09	Total..... 32,966.25	Total..... 33,966.25

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<p>DRY-LAND AGRICULTURE INVESTIGATIONS—Continued.</p> <p>PROJECTS.</p> <p>(1) General supervisory and office work (Professor Chilcott). This project includes the planning and direction of the field work, the conduct of correspondence, all necessary traveling expenses in supervising the work, etc. \$7,529.09</p> <p><i>Results.</i>—The results under this project are reflected in the progress noted under the other projects, described in the following paragraphs.</p> <p>(2) Dickinson project, southwestern North Dakota (Professor Chilcott). The work on this project in dry-land agriculture, as well as that on all of the other projects which follow, consists of experiments in cultivation methods, crop rotations, and methods of conserving moisture in the soil. The object is to improve the agricultural practices in that portion of the semiarid West known as the Great Plains area and to place dry farming in that region on a sound basis; in other words, to bring about the successful growing of crops under semiarid conditions without unnecessary depletion of the fertility of the soil. All of this work is conducted in close cooperation with the state experiment stations in the Great Plains area, with the exception of the Belle Fourche, Akron, and Delhart stations, which are independent. 1,000.00</p> <p><i>Results.</i>—See 1909 column.</p> <p>(3) Williston project, northern North Dakota (Professor Chilcott). The work on this project was essentially similar to that on the Dickinson project, previously described. 500.00</p> <p><i>NOTE.</i>—Work on this project has been suspended for the present.</p> <p>(4) Edgeley project, southeastern North Dakota (Professor Chilcott). The work on this project was essentially similar to that on the Dickinson project, previously described. 1,000.00</p> <p><i>Results.</i>—The land was prepared, laid out, and the rotations and other investigations begun during the season of 1906. Excellent results have been obtained, similarly to those described under the Dickinson project, and these results will become more valuable with each succeeding year.</p> <p>(5) Highmore project, northern South Dakota (Professor Chilcott). The work on this project is essentially similar to that on the Dickinson project, previously described. 1,200.00</p> <p><i>NOTE.</i>—Work on this project has been suspended for the present.</p> <p>(6) Bellefourche project, northwestern South Dakota (Professor Chilcott, in cooperation with Carl S. Scofield, agriculturist in charge of Western Agricultural Extension). This work is conducted on a tract of the Bellefourche irrigation project, placed at our disposal by the Department of the Interior, and upon which it has also expended about \$4,000 for permanent improvements, consisting of a dwelling house, barn, well, fencing, etc. All teams, tools, implements, and other equipment are provided by this office. The work on this project is essentially similar to that on the Dickinson project, previously described. 3,000.00</p> <p><i>Results.</i>—The funds so far expended have been almost entirely for equipment and for breaking and preparing about 40 acres of land for crops. Some fall planting was done and the remainder of the tract will be seeded in the spring.</p> <p>(7) North Platte project, Nebraska (Professor Chilcott). The work on this project is essentially similar to that of the Dickinson project, previously described. 1,200.00</p> <p><i>Results.</i>—The land was prepared, laid out, and the rotations and other investigations begun during the season of 1906. Excellent results have been obtained from the work of the present season, and the field notes have been written up and offered for publication as a Nebraska state bulletin. This project, like all other projects in crop rotations, is necessarily a long-time proposition, and while valuable results are being obtained every year, they become more valuable with each succeeding year.</p>	<p>DRY-LAND AGRICULTURE INVESTIGATIONS—Continued.</p> <p>PROJECTS.</p> <p>(1) General supervisory and office work. \$11,566.25</p> <p>(2) Dickinson project, southwestern North Dakota. 1,500.00</p> <p><i>Results.</i>—The land was prepared, laid out, and the rotations and other investigations begun during the season of 1906. Excellent results have been obtained from the work of the present season, but the field notes have not yet been analyzed sufficiently to enable us to draw definite conclusions. The work of collating, analyzing, and recording these notes in permanent form is now in progress at the office of dry-land agriculture in Washington. This project, like all the other projects in crop rotations, is necessarily a long-time proposition, and while valuable results are being obtained every year, they become more valuable with each succeeding year.</p> <p>(4) Edgeley project, southeastern North Dakota. 1,500.00</p> <p>(6) Bellefourche project, northwestern South Dakota. 4,000.00</p> <p>(7) North Platte project, Nebraska. 1,700.00</p>	<p>DRY-LAND AGRICULTURE INVESTIGATIONS—Continued.</p> <p>PROJECTS.</p> <p>(1) General supervisory and office work. \$12,566.25</p> <p>(2) Dickinson project, southwestern North Dakota. 1,500.00</p> <p>(4) Edgeley project, southeastern North Dakota. 1,500.00</p> <p>(6) Bellefourche project, northwestern South Dakota. 4,000.00</p> <p>(7) North Platte project, Nebraska. 1,700.00</p>

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
DRY-LAND AGRICULTURE INVESTIGATIONS—Continued.	DRY-LAND AGRICULTURE INVESTIGATIONS—Continued.	DRY-LAND AGRICULTURE INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(8) Hays project, northern Kansas (Professor Chilcott). The work on this project is essentially similar to that of the Dickinson project, previously described..... \$1,000.00 <i>Results.</i> —The land was prepared, laid out, and the rotations and other investigations begun during the season of 1906. Excellent results have been obtained from the work of the present season, but the field notes have not yet been analyzed sufficiently to enable us to draw definite conclusions. The work of collating, analyzing, and recording in permanent form of these notes is now in progress at the office of Dry Land Agriculture in Washington. This project, like all other experiments in crop rotations, is necessarily a long-time proposition, and while valuable results are being obtained every year, they become more valuable with each succeeding year.	(8) Hays project, northern Kansas..... \$1,200.00	(8) Hays project, northern Kansas..... \$1,200.00
(9) Garden City project, southwestern Kansas (Professor Chilcott). The work on this project is essentially similar to that of the Dickinson project, previously described..... 1,500.00 <i>Results.</i> —The land on this project was raw prairie and had to be broken and subduced in the spring of 1907. It was laid out into plats and seeded, but the weather proved too dry to produce a crop on sod land. The land is in good condition for cropping next season. A considerable portion of the time of the superintendent of this station was devoted to the work of other projects, particularly Akron, Colo. The Kansas State Experiment Station has not yet provided suitable buildings, but it is hoped that they will during the coming season.	(9) Garden City project, southwestern Kansas..... 1,500.00	(9) Garden City project, southwestern Kansas..... 1,500.00
(10) Akron project, northeastern Colorado (Professor Chilcott). The work on this project is essentially similar to that of the Dickinson project, previously described, except that the experiments are being carried on without the cooperation of the Colorado State Experiment Station. The people of Akron and vicinity have furnished the land and improvements to the value of \$3,000. All teams, tools, implements, and other equipment are provided by this office..... 2,500.00 <i>Results.</i> —The funds so far expended have been almost entirely for the equipment and for breaking and preparing the land for crops. Some fall planting was done, and the remainder of the tract will be seeded in the spring.	(10) Akron project, northeastern Colorado..... 4,000.00	(10) Akron project, northeastern Colorado..... 4,000.00
(11) Amarillo project, Texas Panhandle (Professor Chilcott). The work is essentially similar to that of the Dickinson project, previously described..... 1,000.00 <i>NOTE.</i> —Work on this project has been suspended for the present.		
(12) Dalhart project, Texas (Professor Chilcott). The work on this project is essentially similar to that of the Dickinson project, except that the experiments are carried on without the cooperation of the Texas State Experiment Station. The people of Dalhart and vicinity furnished the land and improvements to the amount of \$4,000. All teams, tools, implements, and other equipment are provided by this office..... 2,500.00 <i>Results.</i> —The funds so far expended have been almost entirely for equipment and for breaking and preparing the land for crops.	(12) Dalhart project, Texas..... 4,000.00	(12) Dalhart project, Texas..... 4,000.00
(13) Judith Basin project, Montana (Professor Chilcott). The work of this project is essentially similar to that of the Dickinson project, previously described..... 1,500.00 <i>Results.</i> —The land on this project was raw prairie and had to be subduced. Forty acres were broken last spring and have since been backset and prepared for seeding in the spring.	(13) Judith Basin project, Montana..... 2,000.00	(13) Judith Basin project, Montana..... 2,000.00
WESTERN AGRICULTURAL EXTENSION. (Carl S. Scofield, agriculturist in charge.)	WESTERN AGRICULTURAL EXTENSION. (Carl S. Scofield, agriculturist in charge.)	WESTERN AGRICULTURAL EXTENSION. (Carl S. Scofield, agriculturist in charge.)
Salaries, statutory..... \$1,859.11 Salaries, lump fund..... 9,711.23 Stationery, furniture, supplies, etc..... 1,383.26 Miscellaneous expenses, freight, express, etc..... 200.00 Traveling and station and field expenses..... 4,896.84 Total..... 18,050.44	Salaries, statutory..... \$2,280.00 Salaries, lump fund..... 13,200.00 Stationery, furniture, supplies, etc..... 2,000.00 Miscellaneous expenses, freight, express, etc..... 200.00 Traveling and station and field expenses..... 6,700.00 Total..... 24,380.00	Salaries, statutory..... \$2,280.00 Salaries, lump fund..... 23,200.00 Stationery, furniture, supplies, etc..... 2,700.00 Miscellaneous expenses, freight, express, etc..... 200.00 Traveling and station and field expenses..... 11,000.00 Total..... 39,380.00 Special additional estimate (see under "Projects")..... 50,000.00

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
WESTERN AGRICULTURAL EXTENSION—Continued.	WESTERN AGRICULTURAL EXTENSION—Con.	WESTERN AGRICULTURAL EXTENSION—Con.
PROJECTS.	PROJECTS.	PROJECTS.
(1) General supervisory and office work (Mr. Scofield). This project includes the planning and direction of the field work, the conduct of correspondence, all necessary traveling expenses in supervising the work, etc. \$7,500.00	(1) General supervisory and office work..... \$11,738.00	(1) General supervisory and office work..... \$16,738.00
<i>Results.</i> —The results under this project are reflected in the progress noted under the other projects, described in the following paragraphs.		
(2) Fallon, Nev., experiment farm (Mr. Scofield). This farm is located on the Truckee-Carson project of the United States Reclamation Service, in cooperation with that branch of the Department of the Interior. The work consists of trials of various field and forage crops to ascertain which crop plants are best adapted to the conditions existing on this project. The objects are to find crops better adapted to this region than the very few now grown there and to work out rotations that will be profitable and that will improve the soil..... 2,550.44	(2) Fallon, Nev., experiment farm. 3,430.00	(2) Fallon, Nev., experiment farm. 3,430.00
<i>Results.</i> —This farm includes 160 acres of land, a part of which is of a type known locally as heavy or "hard" land, and which is not uncommon on the project. This type of soil has been found very difficult to bring into production owing to its peculiar physical nature and to its lack of humus. Persistent tillage and irrigation together with the use of barnyard manure have resulted in a material improvement of this soil, and much of it is now in crop. During the year past about 20 acres of the sandy land of the farm has been leveled and put into crop, making 35 acres in all now under irrigation.		
(3) Yuma, Ariz., experiment farm (Mr. Scofield). This work also is conducted on one of the irrigation projects of the Reclamation Service. The experiments have for their object a demonstration of how best to utilize the relatively high-priced land on this tract. The region is now producing almost nothing but alfalfa, but it is believed that cotton and sorghums can be used in rotation with clover and other winter-growing legumes. Experiments in cultivating high-priced crops with intensive tillage are being conducted..... 2,500.00	(3) Yuma, Ariz., experiment farm. 3,577.00	(3) Yuma, Ariz., experiment farm. 3,577.00
<i>Results.</i> —Highly successful yields of Egyptian cotton have been secured, and considerable emphasis has been placed on that portion of the work during the past year. In order to anticipate the problems that may arise in connection with the establishment of this new industry, it has been necessary to take up the question of determining the best crops to be grown in rotation with cotton, and also to investigate the subject of marketing this crop here in the United States. These lines of work are both well under way, and there now seems good reasons for believing that Egyptian cotton may be profitably grown in the Southwest, that suitable crops may be found to grow in rotation with it, and that the fiber may be marketed at a price that will yield a fair profit to the producer.		
(4) Bellefourche, S. Dak., experiment farm (Mr. Scofield, in cooperation with Dry Land Agriculture Investigations). This work consists of experiments with crops and tillage methods on the irrigated portion of the experiment farm at Bellefourche. This farm consists of a tract set aside by the United States Reclamation Service for the purpose. (The work on the irrigated portion of the tract only is here included)..... 2,000.00	(4) Bellefourche, S. Dak., experiment farm..... 1,715.00	(4) Bellefourche, S. Dak., experiment farm..... 1,715.00
<i>Results.</i> —The work so far at Bellefourche has been of a preliminary character, and much has been done toward preparing the tract for future experimental work.		
(5) San Antonio, Tex., experiment farm (Mr. Scofield). This work consists of the testing of new varieties of crops for the region around San Antonio, as well as of standard crops; experiments with tillage and rotation methods to secure the best crop yields without irrigation; a study of the moisture requirements of the crops grown and the effect of different tillage methods on the absorption and retention of moisture in the soil. The work of the San Antonio farm is conducted with special reference to the cotton boll weevil problem. It has been found that injuries by the boll weevil are much less in a dry climate than in a humid one, and it is therefore important to press the culture of cotton as far west into the arid belt as is possible. The region around San Antonio is essentially arid, but good crops of cotton can be obtained by proper methods of tillage..... 3,500.00	(5) San Antonio, Tex., experiment farm..... 3,920.00	(5) San Antonio, Tex., experiment farm..... 3,920.00
<i>Results.</i> —Excellent crops of corn and cotton have been produced at San Antonio as a result of good tillage methods. The total eradication of Johnson grass has been accomplished in fields that were completely infested, and careful records of the labor involved show that this eradication may be accomplished at a cost of less than \$1.25 per acre. About 10 acres of land on the farm are devoted		

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
WESTERN AGRICULTURAL EXTENSION—Continued.	WESTERN AGRICULTURAL EXTENSION—Con.	WESTERN AGRICULTURAL EXTENSION—Con.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
to experiments with horticultural crops, chiefly the tree fruits. About 400 Mexican seedling peaches have been brought into bearing in the third year of their growth, and among these are 5 or 6 individuals with fruit of fair size and excellent quality.		
		(6) Minidoka, Idaho, experiment farm. This work is to be similar to that on the other reclamation projects, an agreement having been reached with the Reclamation Service for the assignment of a part of the land on the Minidoka project in southern Idaho.....
		\$5,000.00
		(7) Klamath Falls, Oreg., experiment farm. This work is to be similar to that to be taken up at Minidoka, Idaho. The Reclamation Service has agreed to furnish a part of the land of the Klamath Falls project, located in southern Oregon.....
		5,000.00
		(8) Special additional estimate. Owing to the fact that a large number of the reclamation projects are now ready for agricultural development, the Department of the Interior has urgently requested this department to aid it during the next fiscal year by the inauguration of definite agricultural work on not less than ten of the reclamation projects. For the purpose of thus enlarging the scope of the work in cooperation with the Reclamation Service, the following special estimate is made.....
		50,000.00
FOREIGN SEED AND PLANT INTRODUCTION.	FOREIGN SEED AND PLANT INTRODUCTION.	FOREIGN SEED AND PLANT INTRODUCTION.
(David Fairchild, agricultural explorer in charge.)	(David Fairchild, agricultural explorer in charge.)	(David Fairchild, agricultural explorer in charge.)
Salaries, statutory..... \$4,790.50	Salaries, statutory..... \$5,760.00	Salaries, statutory..... \$5,760.00
Salaries, lump fund..... 12,909.56	Salaries, lump fund..... 15,416.99	Salaries, lump fund..... 15,416.99
Stationery, furniture, supplies, etc..... 6,020.14	Stationery, furniture, supplies, etc..... 6,500.00	Stationery, furniture, supplies, etc..... 6,500.00
Miscellaneous expenses, freight, express, etc..... 1,450.00	Miscellaneous expenses, freight, express, etc..... 1,500.00	Miscellaneous expenses, freight, express, etc..... 1,500.00
Traveling and station and field expenses..... 18,000.00	Traveling and station and field expenses..... 28,000.00	Traveling and station and field expenses..... 18,000.00
Total..... 43,170.20	Total..... 57,176.99	Total..... 47,176.99
PROJECTS.	PROJECTS.	PROJECTS.
(1) General expenses of office of seed and plant introduction. Out of this project are paid the expense of actual handling of the newly imported seeds and plants, the cost of their care in the propagating houses, their fumigation and inspection, and also the cost of paying for the postage and other expenses on small quantities of seeds and plants that are secured through consuls, missionaries, traveling Americans, and other cooperators.....	(1) General expenses of office of seed and plant introduction.....	(1) General expenses of office of seed and plant introduction.....
6,140.20	6,140.20	6,140.20
Results.—Over 500 of these small shipments were received last season and have been distributed to the experimenters throughout the country. The majority of these are secured on the request of plant breeders and experimenters in the state experiment stations and the results of the work will not appear except in the write-up of the different experimenters of their successful hybrids or other tests.		
(2) Agricultural explorations in foreign countries. Under this project extensive purchases are made in all parts of the world. They include seeds and plants for trial by experiment stations and others and the shipments arrive at the rate of eight or nine a day.....	(2) Agricultural explorations in foreign countries.....	(2) Agricultural explorations in foreign countries.....
17,000.00	31,106.99	21,106.99
Results.—The new Arabian alfalfa, which yields twelve crops in the southwestern irrigated regions; the Chinese wood oil plant, whose product is used in the manufacture of varnishes; wild beet seeds for the sugar-beet breeders, hardy turnips from Iceland, a Mexican		

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
FOREIGN SEED AND PLANT INTRODUCTION—Continued. PROJECTS—continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued. PROJECTS—continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued. PROJECTS—continued.
drought-resistant peach, a new asparagus for asparagus breeders, new Kafir corns for the West, wild Siberian rhubarbs for those interested in this industry, collections of hardy pears for the Mississippi Valley, are a few of the 1,900 shipments which were made last year under this project. One of our explorers has completed a year of search through Manchuria and North China for hardy fruits, vegetables, grains, and forage crops. He has secured and shipped in over 1,000 things, among them promising new alfalfas, seedless persimmons 4 inches across, hardy Chinese pears, the Shantung peach for the dry Southwest, new North China grapes, the seedless Chinese date, timber bamboos, new cowpeas, new soy beans, a new rose, a new sand cherry, a remarkable series of new shade trees, and new sorghums, barleys, naked oats, buckwheats and wheats which are now being tested in those portions of this country which have a climate like that of North China, where the thermometer goes down to 15 and 20 degrees below zero.		
(3) Grape investigations (Mr. Fairchild, in cooperation with Mr. George C. Husmann, pomologist). Ten experimental vineyards are maintained under this project. In them are being tested a remarkable collection of grapes, especially those resistant to the phylloxera, which is doing such a large amount of damage in California. To discover what is the best stock on which to graft the vineyards of the State is the object of this project. \$2,000.00 <i>Results.</i> —Already most valuable results showing that the popular stock now in use is inferior to some of those being tested have been secured.	(3) Grape investigations. \$2,000.00	(3) Grape investigations. \$2,000.00
(4) Date introductions and date gardens (Mr. Fairchild, in cooperation with Mr. W. T. Swingle, physiologist in charge of Plant Life History Investigations). A large collection of the remarkable date varieties from the upper Tigris River in the region of Bagdad is now being gotten together by the American consul, Mr. Magelssen, and these will be sent to this country next spring. Large purchases of date seeds and fruit of the Morocco varieties have been made this season. Under this project two date gardens in California are being operated. 2,000.00 <i>Results.</i> —It has been demonstrated that the date palm can be grown successfully in California and Arizona as a result of the work on these projects during the last eight years.	(4) Date introductions and date gardens. 2,000.00	(4) Date introductions and date gardens. 2,000.00
(5) Miscellaneous plant introductions. This work consists of the introduction, testing, and propagation of miscellaneous seeds and plants. 3,700.00 <i>Results.</i> —A large collection of yautias, a new wet-land root crop, has been secured for the purpose of increasing them by root division and planting experimental areas in the wet lands of the South, where neither sweet potatoes nor ordinary potatoes can be grown. Among these plants are some of the most important food crops of the Orient, the Pacific islands, and the West Indies. Over 75 varieties have been assembled and are now being propagated in Florida and in the propagating houses of the department. Investigations have recently shown that the great alluvial areas of Texas, Mississippi, Alabama, and Louisiana are particularly suited to the growth of these crops, and as soon as a sufficiently large stock of the plants can be gotten together field tests will be made in that area.	(5) Miscellaneous plant introductions. 3,700.00	(5) Miscellaneous plant introductions. 3,700.00
(6) Bamboo introduction. The timber bamboos of the Orient are among the most profitable plant cultures of the Orientals. Scattering groves of these plants in America have demonstrated that they will grow in the United States. To prove that they can be grown profitably on land that is not now occupied by crops, such as the "canebrake" lands of the South, is the object of this project. The uses in this country to which bamboos can be put are also being studied and it is probable that in cooperation, as temporary irrigation pipes, for screens, for vine stalks, for many kinds of furniture, for bean poles, for light handles for orchard tools, etc., they are to play an important part in this country, as they do in all countries where they are grown. 1,730.00 <i>Results.</i> —Early introductions into our plant garden have been growing successfully and an explorer has been appointed to get up a shipment of the best timber forms and import them the coming spring. Hardier forms than the Japanese have been found in China, drought resistant forms are ordered from India, and the tropical giant forms are requested by the planters in Porto Rico.	(6) Bamboo introduction. 1,730.00	(6) Bamboo introduction. 1,730.00

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
FOREIGN SEED AND PLANT INTRODUCTION—Continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(7) Mississippi Valley plant introduction garden, Ames, Iowa (Mr. Fairchild, in cooperation with Mr. S. A. Beach, collaborator). This garden has just been established as a propagating garden where the hardy fruit plants secured by explorers and by correspondence can be multiplied and from which they can be distributed to the great Mississippi region, where there is a great demand for hardier fruits and where there are a large number of plant breeders who are at the present time trying to develop varieties of hardy fruits which will stand the severe climate of the region. \$1,000.00	(7) Mississippi Valley plant introduction garden, Ames, Iowa..... \$1,000.00	(7) Mississippi Valley plant introduction garden, Ames, Iowa..... \$1,000.00
<i>Results.</i> —Suitable stocks and seedlings have been gotten together, and a search is being made in Central Asia preparatory to sending an explorer there next season after the wild apples, pears, and other fruits known to occur there and believed to be invaluable for breeding experiments.		
(8) Introduced grains (Mr. Fairchild, in cooperation with Mr. M. A. Carleton, cerealist of the bureau). This work includes the testing of the large number of field grains which are imported from foreign countries. Two assistants are at work on it, Mr. H. B. Derr, in charge of the work on feed barleys, and Mr. J. B. Dodson, in charge of the rice work in Texas and Louisiana, while the office of the cerealist conducts the experiments with the other grains. The introduced grains are sent out to selected testing stations scattered over the country, and are there given the first preliminary tests, after which if they prove valuable they are distributed to the farmers. 2,000.00	(8) Introduced grains..... 2,000.00	(8) Introduced grains..... 2,000.00
<i>Results.</i> —The durum wheat introduction, which work was done under this cooperative arrangement, is one of the accomplished facts, and the wheat growers of the Northwest are to-day getting out of its culture over \$1,500,000 more than they would be making if it had not been introduced. Some of the recent introductions are better yielders, much earlier in ripening, and of quite as good quality as the standard sorts. Their early ripening habit is a great advantage, as it makes it possible to distribute the work of harvesting over a long season instead of being obliged to do it all in a hurry.		
(9) Matting-plant introduction (Mr. Fairchild and F. W. Clarke, assistant). The floor-matting industry costs us \$4,000,000 in imports every year. There are perfected looms in America which are fed by imported raw material, rush and sedge straw. The Americans are being shut out of the Japanese market by Japanese manufacturers and must get their raw material in this country or take their machines to Japan and operate them there. 3,100.00	(9) Matting-plant introduction... 3,100.00	(9) Matting-plant introduction .. 3,100.00
<i>Results.</i> —As a result of the work done under this project, an explorer was sent to Japan and secured, notwithstanding the opposition of the Japanese matting guilds, 75,000 plants of the Japanese rush and 380,000 plants of the Japanese sedge. It was found necessary to increase these by propagation at the plant garden at Chico, but carload lots have now been sent to points in Texas, Louisiana, South Carolina, and California, where contracts are let for the planting of acre trial areas under the normal field conditions. The importation of a salt-land reclamation matting crop called "samar," from Egypt, has been so successful that the matting firms declare that its split stems are going to be better than anything they have so far tried for the manufacture of matting.		
(10) Brewing-barley investigations (Albert Mann, expert). The object of this work is to find out what are the best malt barleys, whether they can be grown profitably by the American farmer, and to settle the question of the relative value of pure pedigreed races, and what are the characters of the barley kernel which will determine it as a superior brewing barley. 4,400.00	(10) Brewing - barley investigations..... 4,400.00	(10) Brewing - barley investigations..... 4,400.00
<i>Results.</i> —The pedigreed barley sorts of Europe have been imported and are being tested in all the great barley-growing areas of the country. Their malting value, which will determine whether they will be in special demand by brewers and command higher prices, is being investigated and preparations are inaugurated to breed strains that will be better adapted to our conditions than the imported sorts. Although most of the imported Swedish brewing barleys proved failures this year, one of them was superior in quality to any native sorts grown in the region. The laboratory investigations have shown already the great value of a microscopical knowledge of the germinating barley kernel as a guide to the creation of better variations for this industry.		

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<p>FORAGE CROP INVESTIGATIONS.</p> <p>(C. V. Piper, agrostologist in charge.)</p> <p>Salaries, statutory..... \$3,670.00</p> <p>Salaries, lump fund..... 17,934.56</p> <p>Stationery, furniture, supplies, etc..... 3,652.59</p> <p>Miscellaneous expenses, freight, express, etc..... 1,200.00</p> <p>Traveling and station and field expenses..... 5,284.21</p> <p>Total..... 31,174.36</p>	<p>FORAGE CROP INVESTIGATIONS.</p> <p>(C. V. Piper, agrostologist in charge.)</p> <p>Salaries, statutory..... \$3,720.00</p> <p>Salaries, lump fund..... 16,690.00</p> <p>Stationery, furniture, supplies, etc..... 6,565.00</p> <p>Miscellaneous expenses, freight, express, etc..... 1,500.00</p> <p>Traveling and station and field expenses..... 6,300.00</p> <p>Total..... 34,775.00</p>	<p>FORAGE CROP INVESTIGATIONS.</p> <p>(C. V. Piper, agrostologist in charge.)</p> <p>Salaries, statutory..... \$3,720.00</p> <p>Salaries, lump fund..... 16,690.00</p> <p>Stationery, furniture, supplies, etc..... 6,565.00</p> <p>Miscellaneous expenses, freight, express, etc..... 1,500.00</p> <p>Traveling and station and field expenses..... 6,300.00</p> <p>Total..... 34,775.00</p>
<p>PROJECTS.</p> <p>(1) Alfalfa investigations (J. M. Westgate, assistant agrostologist). This work includes the extension of the present range of alfalfa culture in the East and the introduction of new varieties in the West. Special attention is being given to the development of varieties which will resist cold and drought, as well as varieties which will give greater yields than those ordinarily grown. Tests of new or imported varieties, such as the Arabian, Turkestan, and Siberian alfalfas are a part of the work..... 6,750.00</p> <p><i>Results.</i>—Sand lucern has been found to be remarkably resistant both to cold and drought and, everything considered, seems to be the best alfalfa for the semiarid States and those with very cold winters. It is also among the best as to yield. Heretofore this variety has been neglected owing to the belief that it was only adapted to sandy soils. The Grimm alfalfa which has recently been exploited for Minnesota and neighboring States can not be distinguished from sand lucern. Seed of Grimm alfalfa has been exceedingly scarce, less than one ton having been grown in the five years preceding 1907, while sand lucern is available in quantity.</p> <p>Arabian alfalfa, secured in 1905, has proven to be by far the heaviest yielder in the Southwest. Twelve cuttings were obtained at Mecca, Cal., during the past year against eight for ordinary alfalfa. This is the most remarkable alfalfa yet found for rapidity of growth.</p> <p>Alfalfa culture in the East promises to become important. As a result of our campaign it has been demonstrated that the principal difficulties in the way of success with alfalfa are inoculation and weeds. The latter can be largely controlled by proper cultural methods, especially late summer planting. Where good inoculation has been secured and proper care taken in the selection and preparation of the soil, practically all of our experimenters have had complete success. Much has been learned regarding the great care necessary to secure good inoculation.</p> <p>(2) Investigations of new and standard grasses (R. A. Oakley, assistant agrostologist). This work has for its objects the wider utilization of the standard grasses and the introduction and extension of the culture of new and improved varieties. Experiments with improved varieties of timothy, with meadow and pasture mixtures, and with several new grasses, such as Para grass, Guinea grass, and Natal grass, are features of the work..... 5,800.00</p> <p><i>Results.</i>—It has been demonstrated on the farms of a number of our cooperators that twice as much stock per acre can be carried on properly cared for pasture lands than is now done on the average farm. Our experiments have determined for various sections of the country the best combinations of standard grasses to secure the greatest carrying capacity and this work is being extended to other States.</p> <p>During the past year seed has been distributed of the two improved timothys developed by Dr. A. D. Hopkins, both of which possess very superior merit. One of these ripens with red clover and the other is characterized by large yielding capacity. In the further breeding work with timothy two other varieties have been developed, of which seed will be distributed as soon as it can be grown in quantity.</p> <p>Similar breeding work with orchard grass, red top, and brome grass has resulted in the production of varieties of increased value. It is intended likewise to grow stocks of these seeds for general distribution.</p> <p>Investigations on the growing of brome grass and of meadow fescue in the west have been completed. The results of the investigations on the first grass have been published and those on the meadow fescue are ready for publication.</p>	<p>PROJECTS.</p> <p>(1) Alfalfa investigations..... 7,500.00</p> <p>(2) Investigations of new and standard grasses..... 6,500.00</p>	<p>PROJECTS.</p> <p>(1) Alfalfa investigations..... 7,500.00</p> <p>(2) Investigations of new and standard grasses..... 6,500.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
FORAGE CROP INVESTIGATIONS—Continued. PROJECTS—continued.	FORAGE CROP INVESTIGATIONS—Continued. PROJECTS—continued.	FORAGE CROP INVESTIGATIONS—Continued. PROJECTS—continued.
(3) Cowpea investigations (Professor Piper). The chief object of this work is to secure cheaper and better cowpea seed, so as to bring about a great increase in cowpea culture. The need is for good varieties producing small, hard seeds that will not crack and retain their vitality for more than one year. The cowpea is to the South what clover is to the North, and the lessening of the cost of the seed and the improvement of varieties are important problems. Much attention is being given to the study and development of harvesting machinery..... \$2,750.00 <i>Results.</i> —During the past year over one hundred varieties and strains have been tested, many of them new introductions and others hybrids of recent origin. One of these new hybrids that has been named the Brabham promises to be superior to any yet known and quantities of it will be grown for general distribution. A study of harvesting machinery has resulted in finding a new machine that will thrash cowpeas perfectly. Heretofore most of the seed has been picked by hand. We are encouraging in every way possible the greater production of cowpea seed by the use of this thrasher and other labor-saving appliances. A new bulletin on cowpeas setting forth up-to-date methods of growing and harvesting is ready to print.	(3) Cowpea investigations..... \$3,000.00	(3) Cowpea investigations..... \$3,000.00
(4) Vetch investigations (Professor Piper). This work consists of the introduction and encouragement of the growing of vetches throughout the South. The vetch is an exceedingly important plant and its much wider use is greatly to be desired. The development of varieties that will mature in time for cotton planting and the distribution of seed of desirable varieties are features of the work..... 2,750.00 <i>Results.</i> —About sixty varieties and species of vetches have been tested for two years. One of these, <i>Vicia dasycarpa</i> , is of especial promise, resembling hairy vetch, but being so early that it can be used as a winter crop in rotation with cotton. Seed is being grown in quantity. Extensive cooperative experiments with farmers, especially in the South, with common vetch and hairy vetch have been conducted during the past two years, resulting in great interest in this crop and a greatly increased culture. This work is being continued.	(4) Vetch investigations..... 3,000.00	(4) Vetch investigations..... 3,000.00
(5) Sorghum investigations (A. B. Conner, assistant). This work has for its objects the extension of sorghum culture for forage and the utilization of this plant in the South where the rainfall is more or less deficient. The introduction of new varieties and the testing of all kinds of sorghum are parts of the work. The wider utilization of this plant is of great importance, and seed of improved and pure-bred strains is being propagated for distribution..... 2,500.00 <i>Results.</i> —Of the many new introductions tested during 1908 three of them have much promise. One in particular, from Natal, which we called Pink Kafir, is of such superior excellence that it will be generally distributed as soon as seed can be grown. Large quantities of pure-bred seed from new and improved varieties were grown the past season and will be distributed. A bulletin setting forth the results of the experiments has been prepared. This is of timely importance owing to the great influx of settlers into the dry region where the sorghum crop is of vital importance.	(5) Sorghum investigations..... 2,750.00	(5) Sorghum investigations..... 2,750.00
(6) Adaptation of soy beans to rice lands (Professor Piper). This work is conducted chiefly in Louisiana and Texas, where the need of a leguminous crop for growth in rotation on rice lands has long been felt. Tests of many varieties of soy beans, including a variety used for rotation on the rice lands of central China, are being made. The object is to provide a crop for the rice lands of the South which will not only improve the soil, but will also produce valuable forage..... 2,400.00 <i>Results.</i> —During the past season about one hundred varieties, many of them new introductions, have been tested comparatively, some of them in cooperation with farmers and others. Three of the new varieties are especially adapted to rice lands, being grown in China in rotation with rice. These have been found to be splendidly adapted to the rice lands of Louisiana and Texas and are a satisfactory legume for these soils, something long needed. Among the other new varieties are at least three that exceed in hay and seed yield the Mammoth variety, which is at present the standard in the South. It is proposed to grow these very promising varieties in quantity in 1909 so as to secure seed for distribution.	(6) Adaptation of soy beans to rice lands..... 2,600.00	(6) Adaptation of soy beans to rice lands..... 2,600.00

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Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
FORAGE CROP INVESTIGATIONS—Continued.	FORAGE CROP INVESTIGATIONS—Continued.	FORAGE CROP INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(7) Investigation of forage crops for the cotton boll weevil region (S. M. Tracy, special agent). This work includes the testing of various grasses and other forage plants, especially legumes in the Southern States, especially in the Gulf region. The objects are to introduce and encourage the cultivation of these crops in regions infested by the boll weevil.	(7) Investigation of forage crops for the cotton boll weevil region. \$2,000.00	(7) Investigation of forage crops for the cotton boll weevil region. \$2,000.00
<i>Results.</i> —A great many forage-plant problems applicable to the cotton belt have been worked out and several publications have been issued and distributed among southern farmers. \$1,713.34		
(8) Investigations and tests of miscellaneous forage crops (Professor Piper). This work covers a wide range of forage crops, including berseem, bur clover, crimson clover, crops for green manuring, the mung bean, and several new forage plants, such as the Tangier pea and guar. Extensive tests of these plants are being made in various parts of the country, and their culture in promising localities is being encouraged.	(8) Investigations and tests of miscellaneous forage crops. 7,425.00	(8) Investigations and tests of miscellaneous forage crops. 7,425.00
<i>Results.</i> —This work includes the extensive testing of new introductions at Arlington, Va., Chico, Cal., Pullman, Wash., and Chillicothe, Tex. Among the most valuable new things are the Tangier pea, moth bean, and snail clover, all of which are sufficiently valuable to warrant distribution. Seed of the first two has been grown in quantity for distribution in 1908. 7,078.02		
SEED DISTRIBUTION.	SEED DISTRIBUTION.	SEED DISTRIBUTION.
(Directed by Chief of Bureau Lisle Morrison, assistant in general charge.)	(Directed by Chief of Bureau Lisle Morrison, assistant in general charge.)	(Directed by Chief of Bureau Lisle Morrison, assistant in general charge.)
Salaries, statutory. \$27,611.65	Salaries, statutory. \$22,500.00	Salaries, statutory. \$26,820.00
Salaries, lump fund. 24,487.94	Salaries, lump fund. 21,280.00	Salaries, lump fund. 16,960.00
Stationery, furniture, supplies, etc. 196,641.83	Stationery, furniture, supplies, etc. 142,715.00	Stationery, furniture, supplies, etc. 142,715.00
Miscellaneous expenses, freight, express, etc. 1,500.00	Miscellaneous expenses, freight, express, etc. 1,200.00	Miscellaneous expenses, freight, express, etc. 1,200.00
Rent. 1,640.00	Rent. 4,200.00	Rent. 4,200.00
Traveling and station and field expenses. 1,200.00	Traveling and station and field expenses. 1,550.00	Traveling and station and field expenses. 1,550.00
Total. 253,081.42	Total. 193,445.00	Total. 193,445.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) Vegetable and flower seed distribution. This work forms the largest part of the congressional seed distribution. The regular quotas assigned to each Senator, Representative, and Delegate have been 12,000 packages of vegetable seed and 500 packages of flower seed. 228,000.00	(1) Vegetable and flower seed distribution. 171,000.00	(1) Vegetable and flower seed distribution. 171,000.00
<i>NOTE.</i> —The discrepancy between the amount expended under this project during 1908 and the amounts allotted and estimated, respectively, for 1909 and 1910 is due to the fact that an emergency appropriation of \$50,000 was granted by Congress during 1908 to cover the loss sustained by fire in November, 1907.	<i>NOTE.</i> —Owing to an increase in the price of seed during the present fiscal year, the quotas assigned each Senator, Representative, and Delegate are 10,000 packages of vegetable seed and 500 packages of flower seed.	
(2) Bulb propagation and distribution. This work consists of the securing and sending out of bulbs on congressional order, and also some work in the propagation of Dutch bulbs on the Pacific coast. The regular quota of bulbs is 20 packages of 20 bulbs each, in an assortment of tulip, narcissus, and hyacinth. 7,000.00	(2) Bulb propagation and distribution. 7,000.00	(2) Bulb propagation and distribution. 7,000.00
(3) Grass seed distribution. In the regular congressional distribution each Senator or Member is allotted a quota of 30 packages of lawn grass seed. 3,500.00	(3) Grass seed distribution. 3,000.00	(3) Grass seed distribution. 3,000.00
(4) Grapevine and strawberry plant distribution. The congressional distribution entails the securing and sending out of a large quantity of these plants. The regular quotas are 8 packages of grapevines, containing 5 vines each, and 10 packages of strawberry plants, containing 15 plants each. 3,500.00	(4) Grapevine and strawberry plant distribution. 3,000.00	(4) Grapevine and strawberry plant distribution. 3,000.00
(5) Cotton seed distribution. This consists of the sending out on congressional and other orders of seed of the improved varieties of cotton developed by the plant breeders of the Bureau of Plant Industry. Each Congressman from the cotton States is assigned a regular quota of 80 packages of this select seed, each package containing 1 peck. 5,500.00	(5) Cotton seed distribution. 5,000.00	(5) Cotton seed distribution. 5,000.00
(6) Propagation and distribution of sugar-beet seed. This work is carried on with special reference to the development of a source of domestic production of sugar-beet seed. No regular quota of this seed is allotted in the congressional distribution, the seed being propagated for special distribution on congressional and other request. 4,800.00	(6) Propagation and distribution of sugar-beet seed. 4,000.00	(6) Propagation and distribution of sugar-beet seed. 4,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
SEED DISTRIBUTION—Continued.	SEED DISTRIBUTION—Continued.	SEED DISTRIBUTION—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(7) Tobacco seed distribution. The distribution of tobacco seed, formerly a regular part of the congressional seed distribution, is now confined to the distribution of seed of the improved tobacco varieties developed in the tobacco-breeding investigations of the bureau. The seed is distributed to experimenters for trial, as well as upon congressional request.....	(7) Tobacco seed distribution.... \$300.00	(7) Tobacco seed distribution.... \$300.00
(8) Propagation and distribution of wilt-resistant watermelon seed. This work forms but a small part of the seed distribution, having for its object the trial of the seed of wilt-resistant watermelons developed by the pathologists of the bureau.....	(8) Propagation and distribution of wilt-resistant watermelon seed..... 145.00	(8) Propagation and distribution of wilt-resistant watermelon seed..... 145.00
SOUTH TEXAS GARDEN, BROWNSVILLE, TEX.	SOUTH TEXAS GARDEN, BROWNSVILLE, TEX.	SOUTH TEXAS GARDEN, BROWNSVILLE, TEX.
(E. C. Green, pomologist in charge.)	(E. C. Green, pomologist in charge.)	(E. C. Green, pomologist in charge.)
Salaries, lump fund..... \$6,000.00	Salaries, lump fund..... \$6,000.00	Salaries, lump fund..... \$6,000.00
Stationery, furniture, supplies, etc..... 1,200.00	Stationery, furniture, supplies, etc..... 1,200.00	Stationery, furniture, supplies, etc..... 1,200.00
Miscellaneous expenses, freight, express, etc..... 150.00	Miscellaneous expenses, freight, express, etc..... 150.00	Miscellaneous expenses, freight, express, etc..... 150.00
Traveling and station and field expenses..... 1,682.06	Traveling and station and field expenses..... 1,750.00	Traveling and station and field expenses..... 1,750.00
Total..... 9,032.06	Total..... 9,100.00	Total..... 9,100.00
PROJECT.	PROJECT.	PROJECT.
This garden is located on a part of the Fort Brown Military Reservation. Cooperation with the Texas Experiment Station is in effect. The work has for its objects the testing and propagation of various seeds and plants believed to be especially suited to culture in south Texas and to determine the possibilities of the region in subtropical horticulture. Recently imported Japanese matting rushes are being grown at the garden, as well as other plants which give promise of local adaptability.....	Continuance of the work now under way..... 8,000.00	
Results.—The preliminary work has resulted in the collection of much information which will aid in the development of horticulture and other farming pursuits in the region surrounding Brownsville.		
PLANT INTRODUCTION GARDEN, CHICO, CAL.	PLANT INTRODUCTION GARDEN, CHICO, CAL.	PLANT INTRODUCTION GARDEN, CHICO, CAL.
(August Mayer, expert in charge.)	(W. W. Tracy, jr., in charge.)	(W. W. Tracy, jr., in charge.)
Salaries, lump fund..... \$4,000.00	Salaries, lump fund..... \$5,300.00	Salaries, lump fund..... \$6,300.00
Stationery, furniture, supplies, etc..... 500.00	Stationery, furniture, supplies, etc..... 500.00	Stationery, furniture, supplies, etc..... 500.00
Miscellaneous expenses, freight, express, etc..... 250.00	Miscellaneous expenses, freight, express, etc..... 250.00	Miscellaneous expenses, freight, express, etc..... 250.00
Traveling and station and field expenses..... 4,600.00	Traveling and station and field expenses..... 5,000.00	Traveling and station and field expenses..... 5,000.00
Total..... 9,350.00	Total..... 12,050.00	Total..... 12,050.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) Work of the plant introduction garden. This is the propagating garden for the newly introduced seeds and plants from foreign countries. In it all the large shipments of plants are assembled, whether they are to be grown in the State of California or distributed to the experimenters in other States. Such new things as are suited to the climate there are tested in the forage-plant plots, vegetable gardens, or are set out in the arboretum. The garden consists of 89 acres, 59 of which are actually planted with introduced plants, such as the dry-land pistaches, resistant grapes, fodder cacti, timber bamboos, figs, loquats, hybrid citrus fruits, pomegranates, Chinese dates, Chinese persimmons, and the recently acquired collections of Chinese apricots, peaches, plums, apples, wood oil plants, grapes, and ornamentals secured by agricultural exploration.....	(1) Work of the plant introduction garden..... 9,330.00	(1) Work of the plant introduction garden..... 9,330.00
Results.—The results of the work in this garden appear in the discussion of various other projects, as its office is to propagate plants for the use in other projects. The matting plants, pistaches, Chinese dates, figs, and Japanese paper plants and bamboos are all being propagated in this garden.		
SUBTROPICAL GARDEN, MIAMI, FLA.	SUBTROPICAL GARDEN, MIAMI, FLA.	SUBTROPICAL GARDEN, MIAMI, FLA.
(Ernst A. Bessey, pathologist in charge.)	(Ernst A. Bessey and P. J. Wester, in charge.)	(P. J. Wester, in charge.)
Salaries, statutory..... \$998.89	Salaries, statutory..... \$1,000.00	Salaries, statutory..... \$1,000.00
Salaries, lump fund..... 5,249.58	Salaries, lump fund..... 2,700.00	Salaries, lump fund..... 2,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.			
SUBTROPICAL GARDEN, MIAMI, FLA.—Continued.					
Stationery, furniture, supplies, etc.....	\$200.00	Stationery, furniture, supplies, etc.....	\$200.00		
Miscellaneous expenses, freight, express, etc.....	170.56	Miscellaneous expenses, freight, express, etc.....	150.00		
Traveling and station and field expenses.....	2,761.86	Traveling and station and field expenses.....	2,758.75		
Total.....	9,380.89	Total.....	6,108.75		
PROJECT.					
The work at the subtropical garden during the past fiscal year included the propagation and testing of many of the subtropical fruits introduced through the office of Foreign Seed and Plant Introduction; the propagation of hybrid oranges, pineapples, and other fruits adapted to subtropical latitudes; the study of diseases of citrus trees and of truck crops grown in the far South, and the study of the root injury to plants caused by nematodes.....		9,380.89	Continuance of propagating and testing work.....	6,108.75	
<i>Results.</i> —An apparently new and successful method of budding the mango has been devised and is being tested to determine whether it will prove practicable for general use. Various species of anona have been crossed with success, and it is believed that some desirable new fruits will be produced in this way. A method of budding the sapodillo has been worked out, making it practicable to obtain choice varieties of this fruit by selection and hybridization.					
Much advice has been given to truck-crop growers in Florida as to the various diseases of their crops and the methods of controlling them. Demonstrations of the control of various diseases of citrus trees and fruits have been made.					
Total of all appropriations for the Bureau of Plant Industry for the fiscal year 1908 ..	1,249,641.82	Total of all appropriations for the Bureau of Plant Industry for the fiscal year 1909 (an increase over 1908 of \$92,034.18) ..	1,341,676.00	Total of all appropriations estimated for the Bureau of Plant Industry for the fiscal year 1910 (an estimated increase over 1909 of \$218,960.00) ..	1,560,636.00
Total classified expenditures to September 30, 1908.....	1,196,382.44				
Less repayments to credit of appropriations.....	78.53				
	1,196,303.91				
Advances to temporary special disbursing agents.....	21,786.48				
Total net expenditures to September 30, 1908....	1,218,090.39				
Outstanding liabilities on September 30, 1908.....	23,624.94				
Total expenditures and liabilities for fiscal year 1908.....	1,241,715.33				
Balance to be turned back in Treasury (estimated)....	7,926.49				
Total funds for fiscal year 1908.....	1,249,641.82				

BUILDING, DEPARTMENT OF AGRICULTURE.

Building, Department of Agriculture: Balance available during fiscal year 1908 and continuing available until completion of work, \$495,340.07.

Salaries in Washington.....	\$9,921.97
Traveling expenses.....	592.22
Miscellaneous supplies.....	450,402.12
Stationery.....	4.08
Furniture.....	112.65
Gas and electricity.....	1,013.28
Fuel.....	2,975.89
Freight and express.....	10.05
Telegraph and telephone.....	13.48
Total expenditures July 1, 1907, to June 30, 1908.....	465,045.74
Balance, available until used.....	30,294.33
Total.....	495,340.07

NOTE.—The available balance of \$30,294.33 will probably be expended during the current fiscal year.

No regular estimate for 1910.

NOTE.—The report for the Forest Service has not been included herein, but will be submitted separately as required by 34 Statutes, page 1270.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

BUREAU OF CHEMISTRY.

Detailed expenditures for the fiscal year ended June 30, 1908.			Appropriations for the current fiscal year ending June 30, 1909.		Estimated expenditures for the fiscal year ending June 30, 1910.	
<i>Salaries, Bureau of Chemistry, 1908, \$47,920.</i>			<i>Salaries, Bureau of Chemistry, 1909, \$66,720.</i>		<i>Salaries, Bureau of Chemistry, 1910, \$83,240.</i>	
Wiley, H. W.	Chief of bureau, at \$5,000.	\$5,000.00	1 chemist, who shall be chief of bureau	\$5,000.00	1 chemist, who shall be chief of bureau	\$5,000.00
Linton, Fred B.	Chief clerk, at \$1,600.	1,600.00	1 chief clerk	1,800.00	1 chief clerk	1,800.00
Pierce, A. L.	Clerk, class four	1,725.00	2 clerks, class four	3,600.00	3 clerks, class four (increase of 1 submitted)	5,400.00
Read, M. T.		75.00	4 clerks, class three	6,400.00	6 clerks, class three (increase of 2 submitted)	9,600.00
Baker, Alice L.	Clerk, class three	1,466.66	6 clerks, class two	8,400.00	8 clerks, class two (increase of 2 submitted)	11,200.00
Eckman, Ethel.		124.45	1 property clerk	1,600.00	1 property clerk	1,600.00
Pierce, A. L.	Clerk, class three	66.67	9 clerks, class one	10,800.00	1 clerk (by transfer from lump fund)	1,300.00
Shibley, James G.		1,533.33	8 clerks, at \$1,000 each	8,000.00	9 clerks, class one	10,800.00
Coleman, Jay G.	Clerk, class two	1,291.11	1 assistant property custodian	900.00	9 clerks, at \$1,000 each (increase of 1 by transfer from lump fund)	9,000.00
Dallas, Marie L.		108.89	10 clerks, at \$900 each	9,000.00	1 assistant property custodian	900.00
Grayson, Mary C.	Clerk, class two	1,221.11	1 engineer	1,200.00	12 clerks, at \$900 each (increase of 2 submitted)	10,800.00
Shibley, James G.		58.33	2 messengers, at \$840 each	1,680.00	1 engineer	1,200.00
Parkinson, Nellie A.	Clerk, class two	1,400.00	1 skilled mechanic	900.00	1 messenger (submitted)	900.00
Walters, Harry H.		124.45	3 skilled laborers, at \$720 each	2,160.00	2 messengers, at \$840 each	1,680.00
Coleman, Jay G.	Property clerk, at \$1,600	1,368.89	1 skilled laborer	600.00	1 skilled mechanic	900.00
Eckman, Ethel.		1,106.68	1 fireman	600.00	3 watchmen, at \$720 each (by transfer from lump fund)	2,160.00
Lewis, Elizabeth B.	Clerk, class one	93.33	3 messengers or laborers, at \$600 each	1,800.00	3 skilled laborers, at \$720 each	2,160.00
Emmons, Marion T.	Clerk, class one	1,046.67	3 messengers or laborers, at \$480 each	1,440.00	1 skilled laborer	600.00
Grayson, Mary C.		153.33	2 messengers or laborers, at \$420 each	840.00	1 fireman	600.00
Moore, Mary D.	Clerk, class one	1,200.00	Total of above appropriation (increase over 1908 of \$18,800) 66,720.00		4 messengers or laborers, at \$600 each (increase of 1 by transfer from lump fund)	2,400.00
Nordeman, Agnes M.	Clerk, class one	1,200.00			3 messengers or laborers, at \$480 each	1,440.00
Olson, Herman E.	Clerk, class one	1,200.00			2 messengers or laborers, at \$420 each	840.00
Proctor, Mary F.	Clerk, class one	1,200.00			4 charwomen, at \$240 each (by transfer from lump fund)	960.00
Shipe, Laura F.	Clerk, class one	1,036.67			Total amount estimated (an apparent increase over 1909 of \$16,520) 83,240.00	
Emmons, Marion T.	Clerk, at \$1,000	127.77			NOTE.—The apparent increase is \$16,520, but not considering the places transferred from the lump fund, there is an actual increase of \$10,500.	
Kline, Helen M.		872.23				
Lewis, Elizabeth B.		397.22				
Shuman, Ursula	Clerk, at \$1,000	77.78				
Wood, Myrtle J.		500.00				
Pastle, Stuart A.	Clerk, at \$1,000	569.44				
Paulson, Fannie E.		347.22				
Phillips, Maud	Clerk, at \$1,000	863.90				
Shipe, Laura F.		136.11				
Pray, Oliver F.	Clerk, at \$1,000	541.67				
Pritchett, Kathryn		458.33				
Duvall, Louise	Library clerk, at \$900	402.50				
Whitall, Mary L.		262.50				
Strong, Jacob	Assistant property custodian, at \$900	900.00				
Eckman, Lula L.		427.50				
Lewis, Elizabeth B.	Clerk, at \$900	285.00				
Stickney, Emily G.		187.50				
Gladmon, Percy L.		512.50				
Kline, Helen M.	Clerk, at \$900	115.00				
Pastle, Stuart A.		250.00				
Lambert, May A.	Clerk, at \$900	592.50				
Pitts, Virginia E.		197.50				
Phillips, Cecelia D.	Clerk, at \$900	450.00				
Schieber, Caroline C.		427.50				
Phillips, Maud	Clerk, at \$900	122.50				
Warder, Nannie		762.50				
Shuman, Ursula	Clerk, at \$900	760.00				
Skinner, Laura A.		70.00				
Riggles, Thomas	Engineer, at \$1,200	1,200.00				
Gantt, John E. M.	Messenger, at \$840	840.00				
Johnson, Martin A.	Messenger, at \$840	840.00				
Chick, Thomas	Skilled laborer, at \$720	720.00				
Cohen, Joseph	Skilled laborer, at \$720	360.00				
Guasp, Ignacio	Skilled laborer, at \$720	360.00				
Dugan, Mary A.	Skilled laborer, at \$720	720.00				
Brown, Horace	Skilled laborer, at \$600	600.00				
Kirksey, William	Fireman, at \$600	550.00				
Moffitt, Archie W.		50.00				
George, Sadie A.	Messenger and laborer, at \$480	480.00				
Gerard, Missouri	Messenger and laborer, at \$480	480.00				
Ryon, Lillie	Messenger and laborer, at \$480	480.00				
Cohen, Joseph	Messenger, at \$420	210.00				
Sherfy, Robert E.		210.00				
De Atley, Phoebe	Messenger, at \$420	385.00				
Total		46,902.24				
Unexpended balance		1,017.76				
Total of above appropriation		47,920.00				
The above force performed the following duties:			The above force are performing the following duties:		The above force will perform the following duties:	
Administrative and executive:			Administrative and executive:		Administrative and executive:	
1 chief of bureau	5,000.00		1 chief of bureau	5,000.00	1 chief of bureau	5,000.00
1 chief clerk	1,600.00		1 chief clerk	1,800.00	1 chief clerk	1,800.00
		6,600.00		6,800.00		6,800.00
Supplies and accounts:			Supplies and accounts:		Supplies and accounts:	
1 clerk, class two	1,400.00		1 property clerk	1,600.00	1 clerk, class four	1,800.00
1 clerk, class one	1,200.00		1 clerk, class two	1,400.00	1 property clerk	1,600.00
1 clerk	1,000.00		2 clerks, class one	2,400.00	1 clerk, class two	1,400.00
1 clerk	900.00		1 clerk	900.00	2 clerks, class one	2,400.00
1 assistant property clerk	900.00		1 assistant property custodian	900.00	2 clerks, at \$900 each	1,800.00
		5,400.00		7,200.00	1 assistant property custodian	900.00
						9,900.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Chemistry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Bureau of Chemistry, 1908, \$47,920—Continued.</i>		
Domestic and imported food and drug records: 1 clerk, class three..... \$1,600.00 1 clerk, class one..... 1,200.00 1 clerk..... 900.00 1 clerk..... 900.00	Domestic and imported food and drug records: 1 clerk, class three..... \$1,600.00 1 clerk, class two..... 1,400.00 3 clerks, at \$1,000 each..... 3,000.00 1 clerk..... 900.00	Domestic and imported food and drug records: 1 clerk, class three..... \$1,600.00 2 clerks, class two..... 2,800.00 3 clerks, at \$1,000 each..... 3,000.00 1 clerk, at \$900..... 900.00
Library: 1 clerk..... 900.00	Library: 1 clerk..... 900.00	Library: 1 clerk..... 900.00
Editorial: 1 clerk, class four..... 1,800.00 1 clerk..... 1,000.00	Editorial: 1 clerk, class four..... 1,800.00 1 clerk, class one..... 1,200.00	Editorial: 1 clerk, class four..... 1,800.00 1 clerk, class one..... 1,200.00 1 clerk..... 900.00
Filing and indexing correspondence: 1 clerk, class two..... 1,400.00 1 clerk..... 1,000.00 1 clerk..... 900.00	Filing and indexing correspondence: 1 clerk, class three..... 1,600.00 1 clerk..... 1,000.00 2 clerks, at \$900 each..... 1,800.00	Filing and indexing correspondence: 1 clerk, class three..... 1,600.00 1 clerk..... 1,000.00 2 clerks, at \$900 each..... 1,800.00
Stenography, typewriting, and miscellaneous records: 1 clerk, class three..... 1,600.00 2 clerks, class two..... 2,800.00 2 clerks, class one..... 2,400.00 2 clerks, at \$1,000 each..... 2,000.00 1 clerk..... 900.00	Stenography, typewriting, and miscellaneous records: 1 clerk, class three..... 1,600.00 2 clerks, class two..... 2,800.00 3 clerks, class one..... 3,600.00 2 clerks, at \$1,000 each..... 2,000.00 4 clerks at \$900 each..... 3,600.00	Stenography, typewriting, and miscellaneous records: 1 clerk, class three..... 1,600.00 3 clerks, class two..... 4,200.00 1 clerk..... 1,300.00 3 clerks, class one..... 3,600.00 3 clerks, at \$1,000 each..... 3,000.00 4 clerks, at \$900 each..... 3,600.00
Engine and machine room: 1 engineer..... 1,200.00 1 fireman..... 600.00 1 skilled laborer..... 720.00 1 skilled laborer..... 600.00	Engine and machine room: 1 engineer..... 1,200.00 1 fireman..... 600.00 1 skilled laborer..... 720.00 1 skilled mechanic..... 900.00 1 skilled laborer..... 600.00	Engine and machine room: 1 engineer..... 1,200.00 1 fireman..... 600.00 1 skilled laborer..... 720.00 1 skilled mechanic..... 900.00 1 skilled laborer..... 600.00
Messengers, cleaning, miscellaneous labor: 2 messengers, at \$840 each..... 1,680.00 2 skilled laborers, at \$720 each..... 1,440.00 3 laborers, at \$480 each..... 1,440.00 2 laborers, at \$420 each..... 840.00	Messengers cleaning, miscellaneous labor: 2 messengers, at \$840 each..... 1,680.00 2 skilled laborers, at \$720 each..... 1,440.00 3 messengers, at \$600 each..... 1,800.00 3 laborers, at \$480 each..... 1,440.00 2 laborers, at \$420 each..... 840.00	Messengers, cleaning, miscellaneous labor: 1 messenger..... 900.00 2 messengers, at \$840 each..... 1,680.00 2 skilled laborers, at \$720 each..... 1,440.00 4 messengers, at \$600 each..... 2,400.00 3 laborers, at \$480 each..... 1,440.00 2 laborers, at \$420 each..... 840.00 4 charwomen, at \$240 each..... 960.00
Guaranty records: 2 clerks, class one..... 2,400.00	Guaranty records: 1 clerk, class two..... 1,400.00 1 clerk, class one..... 1,200.00	Guaranty records: 1 clerk, class two..... 1,400.00 1 clerk, class one..... 1,200.00
Inspection records: 1 clerk, class one..... 1,200.00 1 clerk..... 900.00	Inspection records: 1 clerk, class two..... 1,400.00 1 clerk..... 1,000.00 1 clerk..... 900.00	Inspection records: 1 clerk, class three..... 1,600.00 1 clerk, class two..... 1,400.00 1 clerk..... 1,000.00 1 clerk..... 900.00
Records of hearings and citations: 1 clerk, class three..... 1,600.00	Records of hearings and citations: 1 clerk, class four..... 1,800.00 1 clerk, class three..... 1,600.00 2 clerks, class one..... 2,400.00 1 clerk..... 1,000.00	Records of hearings and citations: 1 clerk, class four..... 1,800.00 2 clerks, class three..... 3,200.00 2 clerks, class one..... 2,400.00 1 clerk..... 1,000.00
47,920.00	66,720.00	83,240.00
<i>Laboratory, Department of Agriculture, 1908, \$650,000.</i>		
Lump-fund salaries in Washington..... \$157,118.39 Lump-fund salaries outside of Washington..... 171,386.87 Stationery..... 7,164.28 Miscellaneous supplies and service, equipment, books, machinery, etc..... 51,508.14 Furniture..... 10,233.95 Freight..... 1,866.79 Express..... 3,411.09 Telegraph..... 754.29 Telephone..... 878.83 Rent..... 14,461.32	Lump-fund salaries in Washington..... \$190,800.00 Lump-fund salaries outside of Washington..... 265,700.00 Stationery..... 8,000.00 Miscellaneous supplies and service, equipment, books, machinery, etc..... 63,860.00 Furniture..... 3,000.00 Freight..... 2,000.00 Express..... 3,500.00 Telegraph..... 800.00	Lump-fund salaries in Washington..... \$241,600.00 Lump-fund salaries outside of Washington..... 316,900.00 Stationery..... 8,500.00 Miscellaneous supplies and service, equipment, books, machinery, etc..... 71,860.00 Furniture..... 4,000.00 Freight..... 2,500.00 Express..... 3,500.00 Telegraph..... 900.00
<i>Laboratory, Department of Agriculture, 1909, \$760,000.</i>		
<i>Laboratory, Department of Agriculture, 1910, \$916,760.</i>		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Chemistry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Laboratory, Department of Agriculture, 1908, \$650,000—Continued.</i>	<i>Laboratory, Department of Agriculture, 1909, \$760,000—Continued.</i>	<i>Laboratory, Department of Agriculture, 1910, \$916,760—Continued.</i>
Gas and electricity..... \$2,804.46	Telephone..... \$900.00	Telephone..... \$900.00
Apparatus, instruments, and laboratory material..... 70,134.94	Rent..... 22,550.00	Rent..... 28,600.00
Printing and binding.....	Gas and electricity..... 2,800.00	Gas and electricity..... 3,000.00
Traveling and station and field expenses..... 69,141.79	Apparatus, instruments, and laboratory material..... 97,790.00	Apparatus, instruments, and laboratory material..... 117,200.00
Advance to F. L. Dunlap, temporary special disbursing agent..... 246.61	Printing and binding.....	Printing and binding.....
Total expenditure under above groups to September 30, 1908..... 561,117.75	Travel and station and field expenses..... 98,300.00	Travel and station and field expenses..... 117,300.00
Repayments to the credit of the appropriation..... 78.98		
Net payments under above groups to September 30, 1908..... 561,038.77		
Outstanding liabilities to September 30, 1908 (estimated)..... 67,133.10		
Balance to be turned back in Treasury (estimated)..... 21,828.13		
Total amount of above appropriation..... 650,000.00	Total amount of above appropriation (an increase over 1908 of \$110,000). 760,000.00	Total amount estimated (an apparent increase over 1909 of \$156,760). 916,760.00
Owing to the time required to secure suitable laboratory supplies and competent chemists, a number of the branch laboratories were not put in operation as soon as planned, and the cost of this fiscal year is correspondingly less, leaving a balance which has been estimated for this purpose. Had all the branches been in operation for the full year the entire amount of the appropriation would have been required.		NOTE.—Considering the saving in salaries of places transferred to the statutory roll, amounting to \$6,020, the actual increase is \$162,780.
NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, were necessary in prosecuting the important work of the Bureau of Chemistry. This work fell naturally under the following projects:	NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, are being incurred in prosecuting the important work of the Bureau of Chemistry. This work falls naturally under the following projects:	NOTE.—The above estimates of expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, have been submitted as necessary for prosecuting the important work of the Bureau of Chemistry. This work will fall naturally under the following projects:
PROJECTS.	PROJECTS.	PROJECTS.
(1) Administrative. Office, clerical, and editorial.	(1) Administrative. Office, clerical, and editorial.	(1) Administrative. Office, clerical, and editorial.
Salaries..... \$17,577.67	Salaries..... \$9,500.00	Salaries..... \$12,000.00
Traveling expenses..... 1,935.77	Traveling expenses..... 2,500.00	Traveling expenses..... 2,900.00
Supplies..... 4,841.44	Supplies..... 7,300.00	Supplies..... 8,500.00
General expenses..... 796.84	General expenses..... 700.00	General expenses..... 2,600.00
25,151.72	20,000.00	26,000.60
(2) Food division. Analyzing imported food samples and checking analyses of branch laboratories; study of the influence of preservatives on nutrition; study of the composition of fruit and the manufacture of cider; study of the methods of analyses of food products and methods for detecting adulteration in food products; analyses of samples in connection with study of the effect of cold storage on foods, and examination of domestic food products which enter interstate commerce in connection with the food and drugs act.	NOTE.—The decreased expenditure under this project is due to the fact that certain employees who were paid from the lump-fund appropriation during the fiscal year 1908 were transferred to the statutory roll at the beginning of the fiscal year 1909.	(2) Food division. For continuation and extension of previous lines of work. Both the analytical work and scientific investigations are increased by the extension of the work in connection with the food and drugs act; for investigation of technical methods connected with the manufacture and preparation of foods.
Salaries..... \$33,579.94	Salaries..... \$41,000.00	Salaries..... \$42,000.00
Traveling expenses..... 6,992.99	Traveling expenses..... 4,000.00	Traveling expenses..... 3,500.00
Supplies..... 15,409.36	Supplies..... 12,350.00	Supplies..... 15,350.00
General expenses..... 2,378.74	General expenses..... 2,500.00	General expenses..... 3,500.00
58,361.03	59,850.00	64,350.00
(3) Drug division. Analyzing imported drug samples and checking analyses of branch laboratories; study of methods of drug analyses and methods for detecting adulterations; testing chemical supplies furnished this department by contractors; examining drug products for the Post-Office Department, and testing domestic drug supplies that enter interstate commerce in connection with the food and drugs act.	(3) Drug division. For carrying on the previous work and for study of new problems in drugs and their analysis. The number of check analyses and the entire work of the laboratory, in connection with the food and drugs act, has been greatly increased.	(3) Drug division. For carrying on and extending previous lines of work which is increased by work in connection with the food and drugs act; for the study of synthetic products and preparations containing them; for the study of the preparations of organic compounds and their analysis; for investigating essential oils; for study of the pharmacological action of drug products under the food and drugs act.
Salaries..... \$21,572.25	Salaries..... \$31,000.00	Salaries..... \$39,000.00
Traveling expenses..... 3,138.41	Traveling expenses..... 1,800.00	Traveling expenses..... 2,500.00
Supplies..... 5,006.91	Supplies..... 7,320.00	Supplies..... 11,020.00
General expenses..... 891.87	General expenses..... 1,200.00	General expenses..... 3,000.00
30,609.44	41,320.00	55,520.00

Bureau of Chemistry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
Laboratory, Department of Agriculture, 1908, \$650,000—Continued.	Laboratory, Department of Agriculture, 1909, \$760,000—Continued.	Laboratory, Department of Agriculture, 1910, \$916,760—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(4) Branch food and drug inspection laboratories. Examining samples of imported food and drug products and samples of food and drug products which enter into interstate commerce, and other work in connection with the food and drugs act.	(4) Branch food and drug inspection laboratories. For analyses of samples for conducting hearings and other work in connection with the enforcement of the food and drugs act.	(4) Branch food and drug inspection laboratories. For continuing and extending examinations of food and drug products in connection with enforcement of the food and drugs act.
New York laboratory:	New York laboratory:	New York laboratory:
Salaries.....\$29,714.92	Salaries.....\$31,000.00	Salaries.....\$34,000.00
Traveling expenses.....4,237.43	Traveling expenses.....1,000.00	Traveling expenses.....1,100.00
Supplies.....11,510.31	Supplies.....11,500.00	Supplies.....12,000.00
General expenses.....622.97	General expenses.....2,000.00	General expenses.....1,000.00
	\$46,085.63	\$48,100.00
Boston laboratory:	Boston laboratory:	Boston laboratory:
Salaries.....7,483.67	Salaries.....7,700.00	Salaries.....9,000.00
Traveling expenses.....461.92	Traveling expenses.....500.00	Traveling expenses.....300.00
Supplies.....2,273.16	Supplies.....2,900.00	Supplies.....4,200.00
General expenses.....305.62	General expenses.....600.00	General expenses.....200.00
	10,524.37	13,700.00
San Francisco laboratory:	San Francisco laboratory:	San Francisco laboratory:
Salaries.....6,425.82	Salaries.....6,700.00	Salaries.....8,000.00
Traveling expenses.....566.98	Traveling expenses.....500.00	Traveling expenses.....500.00
Supplies.....1,982.75	Supplies.....2,100.00	Supplies.....3,000.00
General expenses.....179.52	General expenses.....400.00	General expenses.....200.00
	9,155.07	11,700.00
New Orleans laboratory:	New Orleans laboratory:	New Orleans laboratory:
Salaries.....3,453.34	Salaries.....5,200.00	Salaries.....7,000.00
Traveling expenses.....115.97	Traveling expenses.....200.00	Traveling expenses.....200.00
Supplies.....915.49	Supplies.....1,400.00	Supplies.....1,900.00
General expenses.....97.29	General expenses.....400.00	General expenses.....100.00
	4,582.09	9,200.00
Philadelphia laboratory:	Philadelphia laboratory:	Philadelphia laboratory:
Salaries.....5,470.00	Salaries.....6,700.00	Salaries.....9,000.00
Traveling expenses.....264.64	Traveling expenses.....300.00	Traveling expenses.....200.00
Supplies.....2,011.92	Supplies.....2,300.00	Supplies.....2,400.00
General expenses.....122.19	General expenses.....400.00	General expenses.....100.00
	7,868.75	11,700.00
Chicago laboratory:	Chicago laboratory:	Chicago laboratory:
Salaries.....11,668.88	Salaries.....13,900.00	Salaries.....15,000.00
Traveling expenses.....1,458.32	Traveling expenses.....800.00	Traveling expenses.....500.00
Supplies.....6,104.44	Supplies.....5,500.00	Supplies.....7,500.00
Rent.....2,250.00	Rent.....1,800.00	Rent.....1,800.00
General expenses.....794.28	General expenses.....1,300.00	General expenses.....400.00
	22,275.92	25,200.00
St. Paul laboratory:	St. Paul laboratory:	St. Paul laboratory:
Salaries.....7,391.39	Salaries.....8,200.00	Salaries.....8,000.00
Traveling expenses.....277.95	Traveling expenses.....500.00	Traveling expenses.....300.00
Supplies.....1,499.05	Supplies.....2,400.00	Supplies.....3,000.00
General expenses.....202.17	General expenses.....600.00	General expenses.....200.00
	9,370.56	11,500.00
Kansas City laboratory:	Kansas City laboratory:	Kansas City laboratory:
Salaries.....2,170.00	Salaries.....5,500.00	Salaries.....7,500.00
Traveling expenses.....269.93	Traveling expenses.....300.00	Traveling expenses.....100.00
Supplies.....741.09	Supplies.....2,000.00	Supplies.....1,700.00
General expenses.....194.29	General expenses.....100.00	General expenses.....100.00
	3,375.31	9,400.00
Galveston laboratory:	Galveston laboratory:	Galveston laboratory:
Salaries.....1,250.00	Salaries.....6,000.00	Salaries.....7,500.00
Traveling expenses.....349.97	Traveling expenses.....300.00	Traveling expenses.....100.00
Supplies.....1,379.16	Supplies.....1,300.00	Supplies.....1,500.00
General expenses.....209.22	General expenses.....100.00	General expenses.....100.00
	3,188.35	9,200.00
Portland laboratory:	Portland laboratory:	Portland laboratory:
Salaries.....1,557.00	Salaries.....6,000.00	Salaries.....9,000.00
Traveling expenses.....787.10	Traveling expenses.....400.00	Traveling expenses.....100.00
Supplies.....4,743.42	Supplies.....2,000.00	Supplies.....2,400.00
Rent.....1,155.00	Rent.....1,260.00	Rent.....1,260.00
General expenses.....216.40	General expenses.....300.00	General expenses.....100.00
	8,458.92	12,860.00
Buffalo laboratory:	Buffalo laboratory:	Buffalo laboratory:
Salaries.....3,956.67	Salaries.....6,000.00	Salaries.....8,000.00
Traveling expenses.....198.88	Traveling expenses.....200.00	Traveling expenses.....100.00
Supplies.....1,192.38	Supplies.....1,400.00	Supplies.....100.00
General expenses.....279.81	General expenses.....100.00	Supplies.....1,940.00
	5,627.74	General expenses.....100.00
Denver laboratory:	Denver laboratory:	Denver laboratory:
Salaries.....2,855.97	Salaries.....6,300.00	Salaries.....8,000.00
Traveling expenses.....240.87	Traveling expenses.....300.00	Traveling expenses.....400.00
Supplies.....4,058.11	Supplies.....2,000.00	Supplies.....2,100.00
Rent.....1,200.00	Rent.....1,200.00	Rent.....1,200.00
General expenses.....190.21	General expenses.....100.00	General expenses.....200.00
	8,545.16	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Chemistry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Laboratory, Department of Agriculture, 1908, \$650,000—Continued.</i>	<i>Laboratory, Department of Agriculture, 1909, \$760,000—Continued.</i>	<i>Laboratory, Department of Agriculture, 1910, \$916,760—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Detroit laboratory:	Detroit laboratory:	Detroit laboratory:
Salaries.....\$2,652.94	Salaries.....\$5,700.00	Salaries.....\$8,000.00
Traveling expenses.....174.04	Traveling expenses.....200.00	Traveling ex-
Supplies.....831.24	Supplies.....1,600.00	penses.....100.00
Rent.....600.00	Rent.....600.00	Supplies.....2,000.00
General expenses.....179.86	General expenses.....200.00	Rent.....600.00
\$4,438.08	\$8,300.00	General expenses.....100.00
Cincinnati laboratory:	Cincinnati laboratory:	Cincinnati labora-
Salaries.....1,199.33	Salaries.....5,500.00	tory:
Traveling expenses.....566.97	Traveling expenses.....300.00	Salaries.....8,000.00
Supplies.....3,440.00	Supplies.....1,700.00	Traveling ex-
Rent.....1,000.00	Rent.....1,500.00	penses.....100.00
General expenses.....195.22	General expenses.....200.00	Supplies.....2,000.00
6,401.52	9,200.00	Rent.....1,500.00
Savannah laboratory:	Savannah laboratory:	Savannah labora-
Salaries.....1,926.84	Salaries.....5,000.00	tory:
Traveling expenses.....519.23	Traveling expenses.....300.00	Salaries.....8,000.00
Supplies.....1,771.84	Supplies.....1,600.00	Traveling ex-
General expenses.....50.00	General expenses.....100.00	penses.....100.00
4,267.91	7,000.00	Supplies.....2,000.00
Honolulu laboratory:	Honolulu laboratory:	Honolulu labora-
Salaries.....750.00	Salaries.....2,500.00	tory:
Traveling expenses.....142.23	Traveling expenses.....100.00	Salaries.....5,000.00
Supplies.....633.95	Supplies.....1,000.00	Traveling ex-
Rent.....150.00	Rent.....300.00	penses.....100.00
General expenses.....149.20	General expenses.....100.00	Supplies.....1,500.00
1,825.38	4,000.00	Rent.....300.00
Omaha laboratory:	Omaha laboratory:	Omaha laboratory:
Salaries.....400.00	Salaries.....5,000.00	Salaries.....8,000.00
Traveling expenses.....166.79	Traveling expenses.....500.00	Traveling ex-
Supplies.....4,280.85	Supplies.....3,800.00	penses.....100.00
General expenses.....96.15	General expenses.....200.00	Supplies.....2,000.00
4,943.79	9,500.00	General expenses.....100.00
St. Louis laboratory:	St. Louis laboratory:	St. Louis laboratory:
Traveling expenses.....50.00	Salaries.....4,000.00	Salaries.....8,000.00
Supplies.....5,197.03	Traveling expenses.....500.00	Traveling ex-
Rent.....324.00	Supplies.....3,800.00	penses.....100.00
General expenses.....116.19	Rent.....1,296.00	Supplies.....1,910.00
5,637.27	General expenses.....204.00	Rent.....1,296.00
Pittsburg laboratory:	Pittsburg laboratory:	Pittsburg labora-
Traveling expenses.....171.02	Salaries.....4,000.00	tory:
Supplies.....3,658.00	Traveling expenses.....500.00	Salaries.....8,000.00
Rent.....395.00	Supplies.....3,200.00	Traveling ex-
General expenses.....128.17	Rent.....1,580.00	penses.....100.00
4,352.19	General expenses.....220.00	Supplies.....1,920.00
Nashville laboratory:	Nashville laboratory:	Nashville labora-
Supplies.....3,335.43	Salaries.....4,000.00	tory:
General expenses.....124.36	Traveling expenses.....500.00	Salaries.....8,000.00
3,459.79	Supplies.....4,000.00	Traveling ex-
Total for branch laboratories.....180,777.57	General expenses.....200.00	penses.....100.00
	8,700.00	Supplies.....2,500.00
	Total for branch laboratories.. 237,260.00	General expenses.....100.00
		10,700.00
		Total for branch laborato-
		ries.....280,000.00
The first six laboratories examined samples and performed work in connection with the inspection of imported food and drug products and in connection with interstate commerce during the entire year. Ten of the laboratories were completed and performed above-mentioned work during a portion of the year. The remaining five were opened and partially equipped during the latter part of year, on account of the increased work in connection with the enforcement of the food and drugs act.	(5) Inspection work. For inspection work, collecting samples, inspecting food and drug factories and plants in connection with the enforcement of the food and drugs act.	(5) Inspection work. For inspection work, collecting samples, inspecting plants, gathering evidence of interstate shipments, investigating complaints, etc.
Salaries.....\$57,262.59	Salaries.....\$64,000.00	Salaries.....\$72,000.00
Traveling expenses.....50,180.58	Traveling expenses.....60,000.00	Traveling ex-
Supplies.....5,835.37	Samples.....20,000.00	penses.....70,000.00
General expenses.....1,092.63	144,000.00	Samples, supplies, etc.....32,000.00
114,371.17		174,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Chemistry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Laboratory, Department of Agriculture, 1908, \$650,000—Continued.</i>	<i>Laboratory, Department of Agriculture, 1909, \$760,000—Continued.</i>	<i>Laboratory, Department of Agriculture, 1910, \$916,760—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(6) Miscellaneous division. Study of mineral waters and examination of samples under the food and drugs act; examination of town water supplies; study of insecticides, fungicides, and field studies of lead arsenate on foliage; study of relative feeding values and commercial importance of grains; study of methods of analyses of cattle foods; study of the effects of trade wastes on vegetation; and examination of miscellaneous samples for this bureau and for other departments as requested; examination of cattle foods under food and drugs act.	(6) Miscellaneous division. For carrying on previous work and investigations. The work on mineral waters and cattle foods in connection with the food and drugs act has been greatly increased. The insecticide and fungicide investigations are increasing rapidly, as is also the study of effect of trade wastes on vegetation.	(6) Miscellaneous division. For continuing previous lines of work and extending investigations, particularly the study of insecticides and fungicides, and the effect of trade wastes on forests, farm crops, and animals, and devise methods for preventing or mitigating such injury.
Salaries..... \$20,007.99	Salaries..... \$20,000.00	Salaries..... \$24,000.00
Traveling expenses..... 949.04	Traveling expenses.. 1,200.00	Traveling expenses 1,200.00
Supplies..... 4,644.64	Supplies..... 5,490.00	Supplies..... 4,800.00
General expenses..... 809.81	General expenses.... 1,000.00	General expenses.. 1,000.00
\$26,411.48	\$27,690.00	\$31,000.00
(7) Dairy laboratory. Analysis of dairy products for Bureau of Animal Industry, for this bureau, and for other departments as requested; analysis of dairy products in connection with the enforcement of the food and drugs act; study of composition of market dairy products and for study of methods of analysis of dairy products.	(7) Dairy laboratory. For carrying on previous work. The work of this laboratory has been greatly increased by work in connection with the enforcement of the food and drugs act.	(7) Dairy laboratory. For analytical work and investigations of dairy products as previously outlined.
Salaries..... \$6,457.23	Salaries..... \$8,000.00	Salaries..... \$8,000.00
Traveling expenses..... 104.25	Traveling expenses.. 100.00	Traveling expenses 300.00
Supplies..... 280.79	Supplies..... 1,500.00	Supplies..... 2,000.00
General expenses..... 148.24	General expenses.... 200.00	General expenses.. 500.00
6,990.51	9,800.00	10,800.00
(8) Leather and paper laboratory. Study of tanning material; study of sole leather and its adulteration and the factors which determine its quality; study of book-binding leathers; study of paper and paper-making materials; testing paper supplies by contractors to Government Printing Office, Post-Office Department, and other departments, as requested; study of wood turpentine; study of destructive distillation of wood; study of methods of analysis; examination of samples of fertilizers from other bureaus and departments.	(8) Leather and paper laboratory. For continuation of the study of tanning materials with reference to the utilization of such products as grow quickly or which have hitherto been little used, with a view of supplementing the rapidly decreasing supply; for the study of physical and chemical qualities of leather and of the principles of rapid tanning; for studying papers for various uses and for the preparation of standard specifications for such papers; for investigation of new raw materials for pulp and paper making; for the investigation of the production and industrial application of wood turpentine and the study of the destructive distillation of woods; for testing papers supplied by contractors to the Government Printing Office, Post-Office Department, and other departments.	(8) Leather and paper laboratory. For carrying on work and investigations as outlined before.
Salaries..... \$3,233.33	Salaries..... \$9,000.00	Salaries..... \$9,000.00
Traveling expenses..... 280.20	Traveling expenses.. 400.00	Traveling expenses 400.00
Supplies..... 1,377.44	Supplies..... 1,800.00	Supplies..... 2,100.00
General expenses..... 318.41	General expenses.... 300.00	General expenses.. 500.00
10,209.38	11,500.00	12,000.00
(9) Sugar laboratory. Examination of sugar, sirup, and honey samples in connection with imported food law and food and drugs act; study of various raw materials for use in alcohol production; examination of samples in study of effect of the environment on sweet Indian corn; examination of samples of sugar beets and study of methods of analyses of sugar products.	(9) Sugar laboratory. For continuation of previous work; for studying the effect of environment and processes of manufacture upon composition of beet molasses; for study of chemical methods employed in the analysis of sugars and carbohydrates; for examination of samples of sugars and sirups in connection with the enforcement of the food and drugs act. This part of the work has been greatly increased.	(9) Sugar laboratory. Continuing analytical work and investigations of sugar products.
Salaries..... \$4,323.25	Salaries..... \$5,500.00	Salaries..... \$6,500.00
Traveling expenses..... 165.39	Traveling expenses.. 150.00	Traveling expenses 100.00
Supplies..... 1,054.33	Supplies..... 1,400.00	Supplies..... 1,000.00
General expenses..... 284.42	General expenses.... 150.00	General expenses.. 100.00
5,827.39	7,200.00	7,700.00
(10) Contracts laboratory. Test and examination of contract supplies furnished by contractors to this and other departments of the Government; study of methods of testing supplies and the preparation of specifications for contract supplies.	(10) Contracts laboratory. Continuation and extension of tests of contract supplies, furnished by contractors to this and other departments; the study of methods of testing, and the preparation of specifications. The testing of scientific apparatus for use in the new branch laboratories has increased the work of this laboratory.	(10) Contracts laboratory. Continuing work as outlined before; the work of testing supplies for other departments is growing in volume and importance, a great variety of supplies being tested.
Salaries..... \$11,517.78	Salaries..... \$11,500.00	Salaries..... \$14,500.00
Traveling expenses..... 134.00	Traveling expenses.. 100.00	Traveling expenses 100.00
Supplies..... 1,952.32	Supplies..... 2,000.00	Supplies..... 1,900.00
General expenses..... 329.47	General expenses.... 300.00	General expenses.. 300.00
13,933.57	13,900.00	16,800.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1903 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Chemistry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1903.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Laboratory, Department of Agriculture, 1903, \$650,000—Continued.</i>	<i>Laboratory, Department of Agriculture, 1909, \$760,000—Continued.</i>	<i>Laboratory, Department of Agriculture, 1910, \$916,760—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(11) Microchemical laboratory. Microscopical examinations of samples for the other laboratories of the bureau, particularly food and drug samples in connection with the imported food law and food and drugs act; study of tapioca and sago products; study of methods; examination of samples for other bureaus.	(11) Microchemical laboratory. For continuation of previous work; for the microscopic examination of samples in connection with the food and drugs act, the number of which has been greatly increased.	(11) Microchemical laboratory. For carrying on lines of work previously outlined. The number of samples to be examined microscopically increases with the extension of the food and drugs work.
Salaries..... \$5,796.33	Salaries..... \$6,000.00	Salaries..... \$7,000.00
Traveling expenses..... 106.65	Traveling expenses.. 100.00	Traveling expenses 100.00
Supplies..... 337.45	Supplies..... 420.00	Supplies..... 920.00
General expenses..... 122.58	General expenses.... 200.00	General expenses.. 200.00
\$6,363.01	\$6,720.00	\$8,220.00
(12) Bacteriological investigations. Bacteriological examination of all samples for other laboratories requiring such, particularly of waters, milk, cream, and other food products entering into interstate commerce; study of methods of examination; study of organisms found in condensed and evaporated milk; bacteriological study of cold-storage foods.	(12) Bacteriological investigations. Bacteriological examination of samples and for studying the wholesomeness and sanitary condition of foods in connection with the enforcement of the food and drugs act; for investigating in collaboration with the drug division the sterility of various dressings, bandages, pads, ligatures, gauzes, etc., used in surgery; for continuation of previous investigations.	(12) Bacteriological investigations. For carrying on lines of work previously outlined.
Salaries..... \$5,258.34	Salaries..... \$6,500.00	Salaries..... \$7,000.00
Traveling expenses..... 388.86	Traveling expenses.. 250.00	Traveling expenses 200.00
Supplies..... 1,603.21	Supplies..... 1,570.00	Supplies..... 1,220.00
General expenses..... 298.54	General expenses.... 300.00	General expenses.. 200.00
7,548.95	8,620.00	8,620.00
(13) Animal physiological chemistry. Conduct of investigations authorized for the determination of suitability of substances added to foods and the effects which such produce on the vital organs during processes of digestion and excretion.	(13) Animal physiological chemistry. Continuation and extension of previous work. All the analytical work in connection with these studies which was previously done in the food division has been transferred to this laboratory, necessitating an increase in the number of analysts employed. This change was made on account of increased work in the food division in connection with the enforcement of the food and drugs act.	(13) Animal physiological chemistry. For carrying on work previously outlined with reference to the enforcement of the food and drugs act; for experimental work to improve methods of analyses in physiological work. This work is increased by the large number of questions in the enforcement of the food and drugs act as to the healthfulness of substances used in foods.
Salaries..... \$7,905.55	Salaries..... \$9,000.00	Salaries..... \$12,500.00
Traveling expenses..... 270.01	Traveling expenses.. 300.00	Traveling expenses 200.00
Supplies..... 2,439.85	Supplies..... 3,640.00	Supplies..... 4,750.00
General expenses..... 397.29	General expenses.... 500.00	General expenses.. 500.00
11,012.70	13,440.00	17,950.00
(14) Vegetable physiological investigations. In collaboration with Bureau of Plant Industry; study of the improvement of cereals grown in this country; effect of variation of climate on newly introduced varieties of grain; chemical changes in composition of cereals when grown in different localities and at different stages of growth; study of the influence of excessive changes in cereals after grinding, when allowed to age; study of methods of analyses of cereals.	(14) Vegetable physiological chemistry. Continuation and extension of previous work in collaboration with Bureau of Plant Industry; study of the influence of fertilizers, especially phosphate salts, on the gluten content of wheat; study of the influence of preceding legume crops on the gluten content of wheat; study of barley and malts; for the continuation and completion of the work previously done in plant-analysis laboratory.	(14) Vegetable physiological investigations. For continuing lines of work previously outlined in collaboration with the various divisions of the Bureau of Plant Industry; for the study of the chemical, physical, and physiological changes taking place in barley during germination and changes in the composition of cereals during storage, and methods of analysis related to such work.
Salaries..... \$10,667.78	Salaries..... \$11,800.00	Salaries..... \$12,000.00
Traveling expenses..... 194.55	Traveling expenses.. 200.00	Traveling expenses 400.00
Supplies..... 278.06	Supplies..... 1,400.00	Supplies..... 3,000.00
General expenses..... 296.29	General expenses.... 300.00	General expenses.. 800.00
11,436.68	13,700.00	16,200.00
(15) Special investigations:	(15) Special investigations:	(15) Special investigations:
Effects of cold storage on foods, and food research work..... 15,402.38	For examination of nitrogen of all samples requiring such tests. This work has been greatly increased by increase of samples under food and drugs act..... 6,000.00	For examination of nitrogen of all samples requiring such tests. This work is rapidly increasing, because of the great increase of samples under food and drugs act..... 7,000.00
Nitrogen tests and investigations..... 5,052.52	For study of the effects of environment on sweet Indian corn..... 5,000.00	For study of effect of environment on sweet Indian corn..... 5,600.00
Study of the effect of environment on sweet Indian corn..... 5,288.06	For study of fermentation in cider and fruit juices as affecting the chemical composition of their products..... 4,000.00	For study of fermentation in cider and fruit juices as affecting chemical composition of their products..... 6,000.00
Study of fermentation in cider and fruit juices as affecting the chemical composition of their products..... 4,670.32	For special chemical investigations conducted for or in collaboration with other departments as requested; for employment of special agents and others for investigations in connection with enforcement of food and drugs act..... 10,000.00	For special chemical investigations conducted for or in collaboration with other departments as requested..... 10,000.00
Experiments in sulphuring of fruits, sugars, and molasses..... 16,172.33		For special investigations necessary under food and drugs act, for employment of special agents and others in

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Chemistry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<p><i>Laboratory, Department of Agriculture, 1908, \$650,000—Continued.</i></p> <p>PROJECTS—continued.</p> <p>Salaries..... \$24,456.61 Traveling expenses..... 6,572.12 Supplies..... 13,918.48 General expenses..... 1,638.40 \$46,585.61</p> <p>Referee board of scientific experts, to the Secretary of Agriculture.</p> <p>Salaries..... \$2,457.67 Traveling expenses..... 663.94 Supplies..... 2,387.13 General expenses..... 18.80 5,527.54</p>	<p><i>Laboratory, Department of Agriculture, 1909, \$760,000—Continued.</i></p> <p>PROJECTS—continued.</p> <p>Denatured alcohol demonstration and illustration; to demonstrate and illustrate the methods for the making of denatured alcohol, on a scale suitable for utilization by the farmer or associations of farmers..... \$20,000.00</p> <p>Salaries..... \$22,000.00 Traveling expenses.. 3,400.00 Supplies..... 18,400.00 General expenses... 1,200.00 45,000.00</p> <p>Referee board of scientific experts, to the Secretary of Agriculture.</p> <p>Salaries (estimated). \$52,100.00 Other expenses (estimated)..... 47,900.00 100,000.00</p>	<p><i>Laboratory, Department of Agriculture, 1910, \$916,760—Continued.</i></p> <p>PROJECTS—continued.</p> <p>connection with the enforcement of the food and drugs act \$20,000.00</p> <p>Denatured alcohol demonstration and illustration; to demonstrate and illustrate the methods for making of denatured alcohol, on a scale suitable for utilization by the farmer or associations of farmers 10,000.00</p> <p>Salaries..... \$30,000.00 Traveling expenses 10,000.00 Supplies..... 16,600.00 General expenses.. 2,000.00 58,600.00</p> <p>(16) Testing supplies for Isthmian Canal Commission. This work, which covers the testing of a great variety of miscellaneous engineering supplies, has grown very rapidly in the past year. To properly handle it considerable additional equipment and help are urgently needed. Prompt reports are particularly necessary in this work, owing to the fact that shipments of supplies are held up by the commission pending reports from this laboratory.</p> <p>Salaries..... \$10,000.00 Supplies..... 4,000.00 General expenses..... 1,000.00 15,000.00</p> <p>(17) Five additional branch food and drug inspection laboratories. It will be necessary in connection with the enforcement of the food and drugs act to establish additional laboratories in localities near which there is at present no laboratory, in order to properly enforce the act.</p> <p>Cost of original equipment... \$3,000.00 Maintenance for nine months:</p> <p>Salaries..... 6,000.00 Supplies... 2,600.00 General expenses.... 400.00 12,000.00 each. 60,000.00</p> <p>(18) Additional inspection service under the food and drugs act to cover territory not now adequately served.</p> <p>Fifteen additional inspectors:</p> <p>Average salary..... \$1,600.00 Traveling expenses. 1,500.00 Supplies and samples..... 500.00 Total, each inspector..... 3,600.00 54,000.00</p>
<p>Total payments for the entire Bureau of Chemistry to September 30, 1908..... 608,019.99</p> <p>Payments to credit of appropriation..... 78.98</p> <p>Total expenditures to September 30, 1908..... 607,941.01</p> <p>Outstanding liabilities to September 30, 1908 (estimated).... 67,133.10</p> <p>Balance to be turned back in Treasury (estimated)..... 22,845.89</p> <p>Total of all appropriations for the Bureau of Chemistry..... 697,920.00</p>	<p>Total of all appropriations for the current fiscal year ending June 30, 1909..... 826,720.00</p>	<p>Total amount estimated for the Bureau of Chemistry (an increase over 1909 of \$173,280).... 1,000,000.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

BUREAU OF SOILS.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Bureau of Soils, 1908, \$36,980.</i>	<i>Salaries, Bureau of Soils, 1909, \$34,700.</i>	<i>Salaries, Bureau of Soils, 1910, \$34,500.</i>
Whitney, Milton..... Chief of Bureau, at \$3,500..... \$3,500.00	1 soil physicist, who shall be chief of bureau..... \$3,500.00	1 soil physicist, who shall be chief of bureau..... \$3,500.00
Rice, A. G..... Chief clerk, at \$2,000..... 2,000.00	1 chief clerk..... 2,000.00	1 chief clerk..... 2,000.00
Bauman, George W..... Clerk, class four..... 1,800.00	2 clerks, class four..... 3,600.00	2 clerks, class four..... 3,600.00
Seaton, Charles A..... Clerk, class four..... 1,800.00	1 clerk, class three..... 1,000.00	1 clerk, class three..... 1,000.00
Drake, Charles A..... Clerk, class three..... 1,600.00	3 clerks, class two..... 4,200.00	3 clerks, class two..... 4,200.00
Barnes, J. H..... } Clerk, class two..... { 637.77	6 clerks, class one..... 7,200.00	8 clerks, class one (increase of two submitted)..... 9,600.00
King, G. B..... } Clerk, class two..... { 758.33	1 draftsman..... 1,000.00	NOTE.—One draftsman, at \$1,200, and 1 draftsman, at \$1,000, transferred to the lump fund.
Newton, V. B..... Clerk, class two..... 1,400.00	4 clerks, at \$1,000 each..... 4,000.00	4 clerks, at \$1,000 each..... 4,000.00
Wolfe, C. A..... Clerk, class two..... 1,400.00	3 clerks, at \$840 each..... 2,520.00	3 clerks, at \$840 each..... 2,520.00
Clevenger, O. B..... Clerk, class one..... 1,200.00	1 carpenter..... 840.00	1 carpenter..... 840.00
Connolly, A. L..... Clerk, class one..... 1,173.33	1 photographer..... 1,000.00	NOTE.—One photographer, at \$1,000, transferred to the lump fund.
King, G. B..... } Clerk, class one..... { 550.03	1 messenger..... 720.00	1 messenger..... 720.00
Flavin, P. T..... } Clerk, class one..... { 650.00	1 messenger or laborer..... 480.00	1 messenger or laborer..... 480.00
McKericher, J. W..... Clerk, class one..... 1,200.00	1 charwoman or laborer..... 480.00	1 charwoman or laborer..... 480.00
Patterson, M. W..... } Clerk, class one..... { 1,000.00	1 messenger boy..... 360.00	1 messenger boy..... 360.00
Weir, T. B..... } Clerk, class one..... { 200.00		
Stewart, Janette..... Clerk, class one..... 1,200.00		
Wieser, L..... Draftsman, at \$1,200..... 1,200.00		
Briscoe, A. J..... Draftsman, at \$1,000..... 1,000.00		
Cummings, Robert F..... Clerk, at \$1,000..... 1,000.00		
Dickson, E. J..... Clerk, at \$1,000..... 877.78		
Flavin, P. T..... } Clerk, at \$1,000..... { 416.67		
Kemper, John M., jr..... } Clerk, at \$1,000..... { 486.11		
Hodge, F. E..... } Clerk, at \$1,000..... { 833.34		
Patterson, M. W..... } Clerk, at \$1,000..... { 166.66		
Ash, George T..... } Clerk, at \$840..... { 553.00		
Burck, C. A..... } Clerk, at \$840..... { 70.00		
Fill, Howard..... } Clerk, at \$840..... { 67.67		
Hodge, F. E..... } Clerk, at \$840..... { 140.00		
Haygood, Serena..... Clerk, at \$840..... 840.00		
Howe, Sarah W..... Clerk, at \$840..... 793.34		
Blair, S. C..... Carpenter, at \$840..... 840.00		
Bonde, R. J..... Photographer, at \$1,000..... 1,000.00		
Tavener, P. R..... } Fireman, at \$840..... { 500.00		
Weidman, Charles S..... } Fireman, at \$840..... { 280.00		
Groesbeck, D. V. H..... } Watchman, at \$720..... { 266.00		
Talbot, William N..... } Watchman, at \$720..... { 428.00		
Moore, E. U..... Watchman, at \$720..... 720.00		
Bresnahan, M..... Messenger, at \$720..... 720.00		
King, Charles W..... Laborer, at \$480..... 480.00		
Brown, M. L..... Charwoman, at \$480..... 480.00		
Mahan, T. F..... Messenger boy, at \$360..... 360.00		
Total..... 36,643.00		
Unexpended balance..... 332.00		
Total of above appropriation..... 36,980.00		
The above force performed the following duties:	The above force are performing the following duties:	The above force will perform the following duties:
Administration and supervision:	Administration and supervision:	Administration and supervision:
Chief of Bureau..... \$3,500.00	Chief of Bureau..... \$3,500.00	Chief of Bureau..... \$3,500.00
Chief clerk..... 2,000.00	Chief clerk..... 2,000.00	Chief clerk..... 2,000.00
1 clerk, class three..... 1,600.00	2 clerks, class one..... 2,400.00	2 clerks, class one..... 2,400.00
1 clerk, class two..... 1,400.00		
8,500.00	7,900.00	7,900.00
Records and correspondence:	Records and correspondence:	Records and correspondence:
3 clerks, class one..... 3,600.00	1 clerk, class two..... 1,400.00	1 clerk, class two..... 1,400.00
3 clerks, at \$1,000..... 3,000.00	2 clerks, class one..... 2,400.00	3 clerks, class one..... 3,600.00
2 clerks, at \$840..... 1,680.00	2 clerks, at \$1,000..... 2,000.00	2 clerks, at \$1,000..... 2,000.00
8,280.00	3 clerks, at \$840..... 2,520.00	3 clerks, at \$840..... 2,520.00
	8,320.00	9,520.00
Field records and map section:	Field records and map section:	Field records and map section:
1 clerk, class four..... 1,800.00	1 clerk, class four..... 1,800.00	1 clerk, class four..... 1,800.00
1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00	2 clerks, class one..... 2,400.00
1 draftsman..... 1,200.00	1 draftsman..... 1,200.00	1 clerk, at \$1,000..... 1,000.00
1 draftsman..... 1,000.00	1 draftsman..... 1,000.00	
1 clerk..... 1,000.00	1 clerk..... 1,000.00	
1 clerk..... 840.00	1 photographer..... 1,000.00	
1 photographer..... 1,000.00		
8,040.00	7,200.00	
Editorial section:	Editorial section:	Editorial section:
1 clerk, class four..... 1,800.00	1 clerk, class four..... 1,800.00	1 clerk, class four..... 1,800.00
1 clerk, class two..... 1,400.00	2 clerks, class two..... 2,800.00	2 clerks, class two..... 2,800.00
1 clerk, class one..... 1,200.00	1 clerk..... 1,000.00	1 clerk..... 1,000.00
4,400.00	5,600.00	5,600.00
Accounts:	Accounts:	Accounts:
1 clerk, class two..... 1,400.00	1 clerk, class three..... 1,600.00	1 clerk, class three..... 1,600.00
Property records:	Property records:	Property records:
1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00
Messengers, carpenter, laborers, charwoman, etc.:	Messengers, carpenter, laborers, charwoman, etc.:	Messengers, carpenter, laborers, charwoman, etc.:
1 fireman..... 840.00	1 messenger..... 720.00	1 messenger..... 720.00
1 messenger..... 720.00	1 carpenter..... 840.00	1 carpenter..... 840.00
2 watchmen, at \$720..... 1,440.00	1 laborer..... 480.00	1 laborer..... 600.00
1 charwoman..... 480.00	1 charwoman..... 480.00	1 laborer..... 480.00
1 laborer..... 480.00	1 messenger boy..... 360.00	1 charwoman..... 480.00
1 messenger boy..... 360.00		1 messenger boy..... 360.00
1 carpenter..... 840.00		
5,160.00	2,880.00	3,480.00
Total appropriation..... 36,980.00	Total appropriation..... 34,700.00	Total amount estimated..... 34,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Soil investigations, 1908, \$170,000.</i>	<i>Soil investigations, 1909, \$200,000.</i>	<i>Soil investigations, 1910, \$252,600.</i>
Salaries:	Salaries:	Salaries:
In Washington.....	In Washington.....	In Washington.....
Out of Washington.....	Out of Washington.....	Out of Washington.....
Stationery.....	Stationery.....	Stationery.....
Miscellaneous supplies and services, equipment, books, machinery, etc.....	Miscellaneous supplies and services, equipment, books, machinery, etc.....	Miscellaneous supplies and services, equipment, books, machinery, etc.....
Furniture.....	Furniture.....	Furniture.....
Freight.....	Freight.....	Freight.....
Express.....	Express.....	Express.....
Telegraph.....	Telegraph.....	Telegraph.....
Telephone.....	Telephone.....	Telephone.....
Rent.....	Apparatus, instruments, and laboratory materials.....	Apparatus, instruments, and laboratory materials.....
Gas and electricity.....	Travel and station and field expenses.....	Travel and station and field expenses.....
Apparatus, instruments, and laboratory materials.....		
Travel and station and field expenses.....		
Total expenditures to September 30, 1908.....	Total amount of above appropriation (an increase over 1908 of \$30,000).....	Total amount estimated (an apparent increase over 1909 of \$52,600).....
Outstanding liabilities on September 30, 1908 (estimated) ..		
Balance to be turned back in Treasury (estimated).....		
Total amount of above appropriation.....		

NOTE.—The above expenditures, classified in accordance with the suggestion of the Congressional Committee on Expenditures for this department, were necessary in prosecuting the important work of the Bureau of Soils. This work fell naturally under the following projects:

PROJECTS.

Soil survey..... 77,254.61

This work comprises the surveying, both upon a detailed and reconnaissance basis, the mapping, and the classifying of the soils of important areas in various parts of the country, the preparing of reports containing descriptive matter relating to the different soils, their character, origin, and value for crops, and of the agricultural conditions found in each area surveyed. The maps show the distribution of the different soils, and the reports accompanying the maps describe these soils. Any unusual features observed in the field, or shown by the analyses, the particular adaptation of certain types of soil to particular crops, desirable changes in the methods of cultivation or fertilizer practice are pointed out. It is a usual thing for the trained men of the bureau, with their wide experience, to be able to suggest improvements in established industries or to point out new lines of agriculture suited to at least some of the soils of a locality, or to outline methods of soil management that will give larger yields of the crops already grown. The work of the soil survey is planned along lines so complete, and at the same time so practical that the reports and maps are used not only by the landowners themselves in improving the methods of cultivation and of crop rotation, but also by real estate firms in selling property, by state immigration officers, and by prospective purchasers generally. The mapping and classifying of the soils of the United States is also furnishing valuable basic information, which is coming to be used more and more by investigators in all lines of agricultural research. About 20,000 requests are received annually for copies of these maps and reports. The base maps, which show the roads, streams, houses, and township boundaries, are furnished by the Geological Survey, or, where their surveys have not extended, are prepared with the cooperation and assistance of that office.

NOTE.—The above expenditures, classified in accordance with the suggestion of the Congressional Committee on Expenditures for this department, are being incurred in prosecuting the important work of the Bureau of Soils. This work falls naturally under the following projects:

PROJECTS.

Soil survey:
Detailed surveys..... 95,000.00
Reconnaissance surveys—
 Great Plains region..... 50,000.00
 Appalachian region..... 5,000.00
150,000.00

NOTE.—An apparent increase of \$52,600, but deducting the net increase in salaries of employees transferred to and from the statutory roll, amounting to \$2,600, the actual increase in the appropriation is \$50,000.

NOTE.—The above estimates of expenditures, classified in accordance with the suggestion of the Congressional Committee on Expenditures for this department, have been submitted as necessary for prosecuting the important work of the Bureau of Soils. This work will fall naturally under the following projects:

PROJECTS.

Soil survey:
Detailed surveys..... 145,000.00
Reconnaissance surveys—
 Great Plains region..... 50,000.00
 Appalachian region..... 5,000.00
200,000.00

The demand for soil-survey work is very great. On September 1, 1908, there were on file in the Bureau of Soils 476 requests for additional surveys, covering a total area of 488,840 square miles in the various States and Territories. The requests for this work are sent to the bureau as petitions from citizens of different counties and from boards of trade, chambers of commerce of cities located in prominent agricultural districts, from experiment stations, from large development companies, from railroads to aid in their development work, from horticultural societies, from state departments of agriculture, from state geological surveys, and from various other sources. During the fiscal year 1908 soil-survey work was completed or begun in 37 different areas located in 20 different States, covering an area of 17,831 square miles. The surveys were assigned to these areas to meet the requirements of the most urgent requests on file at the office of the Bureau of Soils, while at the same time extending the general knowledge of the Department of Agriculture concerning the major soil groups and the principal agricultural regions of the United States. The general plan has been kept in mind of securing such a thorough distribution of soil-survey areas in different portions of the United States as will ultimately lead to a complete knowledge of all of the different classes of soils which are found within the continental portion of the country. The number of requests received annually is increasing rather than decreasing.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Soil investigations, 1908, \$170,000—Continued.</i>	<i>Soil investigations, 1909, \$200,000—Continued.</i>	<i>Soil investigations, 1910, \$252,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Administration—	<i>Detailed surveys.</i>	<i>Detailed surveys.</i>
This work involves the arrangement of the field parties, the issuing of instructions and information necessary for the proper conduct of the field work, and in general the supervision of details of organization and management of the field parties, and involves some inspection work.	The proposed distribution of this work in the various States and Territories is as follows:	The sum of \$145,000 will be allotted for detailed soil-survey work during the fiscal year 1910, based upon the estimates approved by the Secretary of Agriculture.
Salaries..... \$4,550.00	Administration:	The actual selection of the areas to be surveyed is finally decided in September for the fall and winter, and in February for the spring and summer assignments; therefore the exact areas to be surveyed during the fiscal year 1910 can not be stated at this time.
Traveling expenses..... 644.45	Salaries..... \$3,600.00	The proposed distribution of this work in the various States and Territories is as follows:
Total..... \$5,194.45	Traveling expenses..... 2,400.00	Administration—
Inspection and correlation—	Total..... \$6,000.00	Salaries..... \$4,120.00
This work involves the inspection of the work of the soil-survey parties in the field and the proper correlation of the soils, and insures uniformity and thoroughness in the methods of the field parties and accuracy in determining the proper relationship of the soils mapped in the several areas that have been surveyed. An inspection is made of each area while the soil-survey party is still at work, and all reports are finally reviewed by the assistant in charge to see that the correlation, description, and the naming of the soils are correct in all particulars.	The reorganization of the field work of the Bureau of Soils for the fiscal year 1909, with the discontinuance of the work of soil management and soil utilization, involving the expenditure of double the funds available for soil-survey work in 1908, and including new lines of reconnaissance surveys, necessitated a larger expenditure for salaries and traveling expenses for the administration of these different lines of work.	Traveling expenses..... 2,745.00
Salaries..... \$2,000.00	Inspection and correlation—	Total..... \$6,865.00
Traveling expenses..... 529.02	Salaries..... \$3,000.00	Inspection and correlation:
Total..... 2,529.02	Traveling expenses..... 2,000.00	Salaries..... \$5,120.00
The following areas were surveyed in whole or in part during the fiscal year 1908:	Total..... 5,000.00	Traveling expenses, 3,415.00
<i>Detailed surveys.</i>	The additional work undertaken in the fiscal year 1909, with the increased field force, and the larger number of areas in progress of survey, required for the purposes of efficient inspection and correlation the subdivision of the entire territory of the United States into five different sections, each in charge of an inspector. This increase in the amount of work done and the increased number of inspectors accounts for the increase in the cost of such service.	Total..... 8,535.00
Alabama:	Alabama:	Alabama:
Autauga County (640 square miles surveyed)—	The cooperative work between the Bureau of Soils and the Alabama state department of agriculture in the conduct of soil-survey work in the State of Alabama has been continued with the survey of the following counties: Colbert County, 580 square miles; Calhoun County, 636 square miles; Cullman County, 595 square miles; Etowah County, 533 square miles; Jefferson County, 1,059 square miles.	In cooperation with the Alabama Department of Agriculture and industries, which is expending approximately \$10,000 of the state funds annually in connection with the work, soil surveys in ten additional counties should be made. This will involve an expenditure of not less than \$10,000 on the part of the Bureau of Soils. The counties to be surveyed are selected after conference between the chief of the Bureau of Soils and the commissioner of agriculture and industries for Alabama concerning the needs of that State.
Salaries..... \$906.11	Five additional counties will be undertaken during the month of January to constitute the assignments for the last half of the fiscal year. These will be selected from a large number of requests upon consultation with the commissioner of agriculture and industries of the State of Alabama. During the fiscal year 1909 about \$12,000 will be expended by the bureau in this State.	These surveys are being conducted in response to legislative enactment by the State of Alabama, and to urgent requests from officers, representatives, and citizens of the State.
Field expenses..... 564.71	Arkansas:	Arkansas:
Total..... 1,470.82	Pulaski County was selected on account of the great number of interests requesting the survey, and, while the work will be started during this fiscal year, it will probably not be possible to complete more than 400 square miles, at an estimated cost of \$1,590.	Not less than \$2,500 should be expended in this State to survey at least 2 counties selected from the 15 for which urgent requests have been made by colonization companies, lumber companies, railroads, boards of trade, the state experiment station, and other organizations interested in developing the agricultural industries in the State.
Survey to be completed during fiscal year 1909.	California:	California:
Baldwin County (750 square miles surveyed)—	Livermore Valley area, 250 square miles; Red Bluff area, 500 square miles; Yolo County, 996 square miles; Yuba and Sutter counties, 800 square miles.	The sum of \$3,000 should be expended in extending soil surveys in this State, giving due regard to the requests for 17 areas that are on file. The areas selected should also take into
Salaries..... \$827.78	The above areas can probably	
Field expenses..... 528.25		
Total..... 1,356.03		
Bibb County (520 square miles surveyed)—		
Salaries..... \$957.33		
Field expenses..... 779.43		
Total..... 1,736.76		
Henry County (550 square miles surveyed)—		
Salaries..... \$1,378.34		
Field expenses..... 863.87		
Total..... 2,242.21		
Lamar County (600 square miles surveyed)—		
Salaries..... \$515.54		
Field expenses..... 371.88		
Total..... 887.42		
California:		
Long Beach area (detailed soil and alkali surveys of large alkali reclamation tract near Long Beach, Cal.)—		
Salaries..... \$402.80		
Field expenses..... 208.66		
Total..... 611.46		

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Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Soil investigations, 1908, \$170,000—Continued.</i>	<i>Soil investigations, 1909, \$200,000—Continued.</i>	<i>Soil investigations, 1910, \$252,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Detailed surveys—Continued.	Detailed surveys—Continued.	Detailed surveys—Continued.
Modesto area (820 square miles surveyed)—	be completed at an estimated cost of \$9,000. Important industries are rapidly being extended in each of the areas which have been selected.	consideration the completion, at as early a date as practicable, of the surveys of the Sacramento and San Joaquin valleys, where private and federal irrigation systems are transforming the great grain ranches into fruit and vegetable farms. It is also highly desirable to complete the soil survey of the many coast valleys, and especially of the northwestern portion of the State, where the agricultural possibilities are as yet but little known.
Salaries..... \$3,279.98		Colorado:
Field expenses..... 2,019.59		There yet remain unsurveyed several sections in the western and other parts of the State, and the sum of \$2,000 should be devoted to soil surveys, giving preference to the lands that are comprised in the Reclamation Service projects, in which exact knowledge of the soil will aid in developing the lands along the lines for which they are best suited. In this way important alfalfa, sugar-beet, and fruit-growing industries may be quickly built up.
Total..... \$5,299.57		Florida:
Porterville area (335 square miles surveyed)—		With an expenditure of \$2,500 soil surveys could be made of Putnam and Hernando counties to determine the extent and distribution of soils suited to the production of winter truck crops and citrus fruits. Urgent petitions are on file for soil surveys of these and 13 other counties in Florida, aggregating an area of more than 18,000 square miles of territory. The large areas of unoccupied or newly developed agricultural lands, and the necessities of numerous new settlers would more than justify this expenditure.
Salaries..... \$1,248.90		Georgia:
Field expenses..... 663.14		There are on file 31 requests for soil surveys in this State, covering an area of over 12,000 square miles. The establishment of agricultural high schools in each of the 11 congressional districts of the State renders desirable a soil survey of each county in which such a school is located. The following counties should be taken up as rapidly as funds are made available: Bullock, Tift, Sumter, Carroll, Walton, Pike, Cobb, Morgan, Habersham, Hancock, and Coffee, and not less than \$3,500 should be expended in the prosecution of this work.
Total..... 1,912.04		Idaho:
Survey to be completed during fiscal year 1909.		Four areas have been surveyed in this State, but the sum of \$2,000 should be expended in soil surveys to assist in the development of the large tracts of land recently or about to be watered by irrigation systems constructed by private enterprise and by the Federal Reclamation Service.
Redding area (200 square miles surveyed)—		Illinois:
Salaries..... \$921.67		There are requests for the soil survey of 6 counties in Illinois, which cover a total of 4,638 square miles. No soil-survey work has been conducted by the Bureau of Soils in this State since 1903, and in order to complete the knowledge of Illinois soils necessary to a general classification of the soils of the United States not less than \$2,000
Field expenses..... 495.17		
Total..... 1,416.84		
Georgia:	Florida:	
Grady County (315 square miles surveyed)—	Jackson County was selected as the area to be covered by soil survey during the fiscal year 1909. A large number of requests for the extension of the soil survey into this county were received, based upon the desire of the people of the county to extend, if possible, the profitable cultivation of both the Cuban filler and the shade-grown Sumatra wrapper tobacco. As a first step to the extension of this industry, the determination, location, and extent of the proper soils within Jackson County was desired. The survey of this county, covering 963 square miles, will involve an estimated expenditure of \$2,750.	
Salaries..... \$643.54		
Field expenses..... 445.00		
Total..... 1,088.54		
Special large scale detailed surveys of district agricultural school farms—	Georgia:	
Salaries..... \$422.22	Tift County, 200 square miles; Pike County, 294 square miles; Franklin County, 344 square miles; Hancock County, 523 square miles.	
Field expenses..... 238.73	These counties were selected from a large number of requests, and are representative of the soil conditions over a considerable portion of the State. The completion of the soil-survey work in these four counties is estimated to cost about \$4,000.	
Total..... 660.95		
Thomas County (535 square miles surveyed)—		
Salaries..... \$1,092.02		
Field expenses..... 757.72		
Total..... 1,849.74		
Idaho:		
Minidoka area (146 square miles surveyed)—		
Salaries..... \$393.32		
Field expenses..... 249.50		
Total..... 642.82		

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Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Soil investigations, 1908, \$170,000—Continued.</i>	<i>Soil investigations, 1909, \$200,000—Continued.</i>	<i>Soil investigations, 1910, \$252,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>
Indiana:	Indiana:	Indiana:
Marion County (290 square miles surveyed)—	Urgent requests for additional soil-survey work in northeastern Indiana were met by the assignment of a survey in Allen County, which has an area of 600 square miles. This survey has been completed at an approximate cost of \$1,500.	Not less than \$2,000 should be expended for the extension of soil-survey work in this State. There are on file requests for the survey of 20 different areas, aggregating over 9,000 square miles of territory, and the work should be vigorously pushed throughout the State.
Salaries..... \$366.66		
Field expenses..... 221.06		
Total..... \$587.72		
Area surveyed in part during previous fiscal year.		
		Iowa:
		In order to extend our knowledge of the soils of this important agricultural State at least one additional county should be surveyed, at an estimated cost of \$2,000. Requests are on file for 5 different areas, and the area to be surveyed should be selected with reference to these requests, and also take into consideration the large areas of the State in which no surveys have been made.
		Kansas:
		In justice to the agricultural interests in this State, the sum of \$2,500 should be expended on detailed soil surveys. Requests are on file for the survey of 7 areas, and this work has been strongly urged by the State University, the Agricultural College, various farmers, and by horticultural and county societies interested in securing the information afforded by soil-survey work.
		Kentucky:
		In order to extend the knowledge of the different soils in this State and to show their relationship to important soil types both to the north and to the south, not less than \$2,500 should be expended in additional soil surveys in Kentucky, from which State there are on file four requests covering about 1,500 square miles of territory.
		Louisiana:
		The sum of \$2,500 should be expended on soil survey work in this State to gain additional information which will bear upon the extension of the rice, cotton, truck, fruit, and sugar cane industries. Twelve areas have been requested, and on account of the interest manifested by the Agricultural Experiment Station, the areas requested by this organization should be given preference.
Louisiana:	Louisiana:	
Bienville Parish (536 square miles surveyed)—	Lincoln Parish was selected upon the request of the Louisiana Experiment Station, which is greatly interested in having the soil survey of the State completed as early as possible. It is estimated that this parish, covering an area of 564 square miles, can be completed at a cost of \$2,000.	
Salaries..... \$1,677.21		
Field expenses..... 999.50		
Total..... 2,676.80		
East and West Carroll parishes (747 square miles surveyed)—		
Salaries..... \$1,077.23		
Field expenses..... 822.94		
Total..... 1,920.17		
Winn Parish (153 square miles surveyed)—		
Salaries..... \$437.84		
Field expenses..... 423.98		
Total..... 861.82		
Area surveyed in part during previous fiscal year.		
	Maine:	Maine:
	At the request of the Maine Agricultural Experiment Station, soil survey work was undertaken in Aroostook County. The main object was to investigate the character and distribution of the soils of the famous Aroostook potato district. The cost of making this survey, which covered 550 square miles, was approximately \$1,500.	The officers of the State College of Agriculture and Experiment Station urgently request that soil survey work should be actively taken up in the southern portion of the State of Maine to aid the state institutions in the development of the agricultural resources of that section. In order that this work may be properly undertaken, not less than \$2,000 should be expended in additional soil sur-

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Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Soil investigations, 1908, \$170,000—Continued.</i>	<i>Soil investigations, 1909, \$200,000—Continued.</i>	<i>Soil investigations, 1910, \$252,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>
Maryland:	Maryland:	Maryland:
Easton area (966 square miles surveyed)—	In cooperation with the Maryland Geological Survey, a soil survey of Anne Arundel County, covering an area of 425 square miles, will be made during the present fiscal year at an estimated cost of \$1,000.	The progress of the work carried on in cooperation with the Maryland Geological Survey requires that at least one county should be surveyed annually until the entire State is completed. In addition to the regular publication by the United States Department of Agriculture, the soil survey maps and reports are also published by the Maryland Geological Survey, as a portion of their county reports on the geological and economic resources of the State. \$1,500 should cover the expenditure necessary for the continuation of this programme. Either Baltimore County or a county in the western part of the State should be selected on advice with the director of the Maryland Geological Survey.
Salaries..... \$1,168.87		Massachusetts:
Field expenses..... 740.65		In order to properly extend the study of the soils of Massachusetts, not less than two soil surveys should be made in that State during the fiscal year 1910. One of these should be selected for the benefit of the market garden and trucking industries in the vicinity of Boston and the other to investigate the capabilities of the soils of the hill portion of the State. For this purpose an allotment of \$2,000 is desirable. It is also necessary to undertake this work in connection with the bureau's study of soil conditions throughout the northeastern States, where changes in economic conditions have rendered advisable changes in the management and cropping of the soils of these long cultivated lands.
Total..... \$1,909.52		Michigan:
Area surveyed in part during previous fiscal year.		A further study of the capabilities of the soils of the cut-over timber lands in Michigan; a further location of the soils suited to the sugar-beet industry; and an extension of work to show the distribution of the fruit and market garden soils throughout the State, render desirable the expenditure of not less than \$2,500 in the prosecution of soil-survey work in Michigan.
	Michigan:	Minnesota:
	In order to study soil conditions in the northern part of the southern peninsula of Michigan, and particularly in a portion of the region where the timber has been cut off, a soil survey of Wexford County, with an area of 575 square miles, was assigned during the current fiscal year. The soil survey of this county has been completed at an approximate cost of \$560.	On account of the small amount of soil-survey work previously done in this State, not less than \$3,000 should be expended to determine the capabilities of large areas of land at present in an undeveloped state owing to forest growth or poor drainage conditions. The eight areas that have been requested are mainly located in sections where exact knowledge of the soil is needed to enable an early achievement of the greatest agricultural development.
	Minnesota:	Mississippi:
	The survey of Rice County can only be started this year, and an area of probably 250 square miles will be completed at an estimated cost of \$1,000.	There are on file 16 requests for soil surveys covering an area of 11,600 square miles. These requests come from all parts of the State and cover practically all of the agricultural interests of the
Mississippi:	Mississippi:	
Holmes County (825 square miles surveyed)—	Clay County, 399 square miles;	
Salaries..... \$618.34	Jackson County (in part), 500 square miles.	
Field expenses..... 491.43	These two counties were selected from a large number of requests for additional soil, survey	
Total..... 1,109.77		

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Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Soil investigations, 1908, \$170,000—Continued.</i>	<i>Soil investigations, 1909, \$200,000—Continued.</i>	<i>Soil investigations, 1910, \$252,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Detailed surveys—Continued.	Detailed surveys—Continued.	Detailed surveys—Continued.
Monroe County (762 square miles surveyed)—	work in the State of Mississippi.	State. In order that a reasonable number of these surveys may be carried on, not less than \$2,500 should be expended upon this work during the fiscal year 1910.
Salaries..... \$2,256.12	It is estimated that the cost of a soil survey of the two counties will be approximately \$3,000.	Missouri:
Field expenses..... 1,572.46		There still remain in this State large unsurveyed areas, and not less than \$3,500 should be devoted to surveys of those sections where important fruit, truck, and other agricultural industries will be aided by expert knowledge of the soil. If possible, in prosecuting this work cooperation with the State College of Agriculture and Mechanic Arts of the University of Missouri should be arranged, inasmuch as this institution is greatly interested in field studies of the soil resources of the State.
Total..... \$3,828.58	Missouri:	Montana:
Missouri:	In this State it will be possible to complete Bates County and also take up the survey of Cooper County. The latter county will probably not be completed by the close of the present fiscal year. It is estimated that the sum of \$2,500 will be necessary to carry on the field work planned for this year in this State.	At least \$2,000 should be expended on additional soil surveys in this State as an aid to the further development of those sections where irrigation systems have been completed. Those tracts of land irrigated by the Reclamation Service should receive first consideration in the selection of areas.
Bates County—		Nebraska:
Salaries..... \$3.89		In this State not less than \$2,500 should be expended in soil surveys, to furnish additional information in regard to the suitability of the soils for the extension of the dairy, sugar-beet, and general farming industries. Thirteen areas have been requested by various organizations, chief of which are the Agricultural Experiment Station and State University, and in selecting areas preference should be given to those counties where knowledge of the soils will aid these state organizations.
Field expenses..... 3.05		Nevada:
Total..... 6.94		Although generally considered a nonagricultural State, large quantities of food supplies are required to supply the rapidly growing population around the numerous mining camps, and at least \$1,500 should be devoted to studying those limited areas where irrigation and dry farming may be carried on. The first purpose of this work should be to determine the suitability of the soils to produce under intensive farming methods the different vegetables and fruits adapted to the climatic conditions of the State.
Work begun June 30, 1908, and will be completed during fiscal year 1909.		New Hampshire:
Nebraska:		Requests from the state for- ester and from the State College of Agriculture in New Hampshire for additional soil surveys in that State would indicate that it is advisable to expend \$2,000 in the prosecution of soil surveys in New Hampshire during the fiscal year 1910. One county should be selected in the northern part of the State and an additional county in the southern part. Both of these surveys would also be desirable from the standpoint of extending the general knowledge of the soils of the different portions of New England.
North Platte area (210 square miles surveyed)—		New Jersey:
Salaries..... \$370.00		Only two soil surveys have so far been made in the State of New Jersey, and in order that additional work may be taken up not less than \$1,500 should be expended in this State during the fiscal year 1910. Work should preferably be done in the northern part of the State.
Field expenses..... 183.45		
Total..... 553.45		
Area surveyed in part during previous fiscal year.		
	Nevada:	
	In cooperation with the Reclamation Service, it is proposed to survey the lands included in the Truckee-Carson reclamation project. Probably 300 square miles of the land included in this project will be completed by the close of this year at a cost of \$1,000.	

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Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Soil investigations, 1908, \$170,000—Continued.</i>	<i>Soil investigations, 1909, \$200,000—Continued.</i>	<i>Soil investigations, 1910, \$252,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>
New York:	New York:	New York:
Dutchess County (745 square miles surveyed).	Livingston County, 635 square miles; Montgomery County, 399 square miles; Washington County, 977 square miles.	The New York State College of Agriculture has requested that, as rapidly as possible, a soil survey of all of the agricultural portion of the State should be completed in cooperation with that organization. To bring about this result the state college is furnishing both funds and men, and has suggested a list of counties of which surveys should be made as soon as possible, in order that the agricultural and horticultural surveys conducted by the State College of Agriculture may follow and be based upon the federal soil surveys. In order that proper progress may be made in this important work, not less than \$4,000 should be expended in soil surveys equably distributed throughout the different agricultural regions in the State.
Salaries..... \$1,134.99	In addition to these three counties, work will be undertaken near the end of the fiscal year in an additional county. All of the work in New York State is undertaken at the direct request of the New York State College of Agriculture that soil surveys should be extended as rapidly as possible throughout the State, in order to serve as a basis for further investigations along the lines of agriculture and horticulture conducted by the college itself. In addition, the New York State College of Agriculture is contributing annually about \$1,500 to the prosecution of soil-survey work in the State in order that a larger area may be covered during each year. The expenditures of the Bureau of Soils in this State during the fiscal year 1909 are estimated at \$3,500.	
Field expenses..... 831.11		
Total..... \$1,966.10		
Area surveyed in part during previous fiscal year.	North Carolina:	North Carolina:
	Caswell County, 396 square miles; Pitt County, 644 square miles; Gaston County, 359 square miles; Scotland County, 387 square miles.	There are on file in the Bureau of Soils 27 different requests for additional soil-survey work in this State, and the North Carolina state department of agriculture has indicated its willingness to increase the financial cooperation which that organization has continued with the Bureau of Soils for several years. In North Carolina the soil surveys are used as a basis for the location of branch experiment farms throughout the different agricultural regions of the State, and a considerable portion of the work of the state department of agriculture is based upon the findings of the soil surveys. In order that this work may make progress satisfactory to the State authorities and to the citizens of the State, not less than \$4,000 should be expended in soil-survey work in North Carolina during the fiscal year 1910.
North Carolina:		
Henderson County (319 square miles surveyed).		
Salaries..... \$226.66		
Field expenses..... 196.14		
Total..... 422.80		
Area surveyed in part during previous fiscal year.	These four counties were selected for soil survey at the request of the North Carolina state department of agriculture, which is actively cooperating with the Bureau of Soils in the prosecution of soil-survey work within the State. The soil-survey work is directly followed up by the state department of agriculture with further investigations and by the establishment of branch experiment farms as rapidly as areas are completed in the different portions of the State. At the request of the state department of agriculture, an increase was made in the amount of work to be done in the State during the fiscal year 1909, and it is estimated that approximately \$3,500 will be expended in making the soil survey of these four counties.	
Area surveyed in cooperation with North Carolina department of agriculture.	North Dakota:	North Dakota:
Robeson County (945 square miles surveyed).	In cooperation with the North Dakota agricultural and economic geological survey, there has been completed this year the survey of Richland County, having an area of 1,445 square miles. The cost of this survey to the bureau is approximately \$2,600.	In this State the sum of \$2,000 is needed to extend the soil-survey work. The survey is carried on in close cooperation with the state agricultural and economic geological survey, which each year contributes considerable sums of money to further the progress of a soil survey of the entire State.
Salaries..... \$1,318.83		
Field expenses..... 1,051.80		
Total..... 2,370.63		
Area surveyed in part during previous fiscal year.		
Area surveyed in cooperation with North Carolina department of agriculture.		
North Dakota:		
McKenzie area (348 square miles surveyed).		
Salaries..... \$489.99		
Field expenses..... 547.28		
Total..... 1,037.27		
Area surveyed in part during previous fiscal year.		
Area surveyed in cooperation with North Dakota agricultural and economic geological survey.		
Morton area (436 square miles surveyed).		
Salaries..... \$497.78		
Field expenses..... 530.15		
Total..... 1,027.93		
Area surveyed in part during previous fiscal year.		
Area surveyed in cooperation with North Dakota agricultural and economic geological survey.		
		Ohio:
		In order to extend the study of the fruit soils of the Lake Erie grape belt, to study the general distribution of the different soils of the State of Ohio, and to undertake additional work in the southeastern nonglaciated portion of the State, not less than \$2,000 should be expended in the State of Ohio for additional surveys during the fiscal year 1910.

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Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Soil investigations, 1908, \$170,000—Continued.</i>	<i>Soil investigations, 1909, \$200,000—Continued.</i>	<i>Soil investigations, 1910, \$252,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>
 Pennsylvania:	 Oklahoma:	 Oklahoma:
Center County (197 square miles surveyed).	Craig County, covering an area of 800 square miles, has been selected for work during this year, but the work will probably not be started until the middle of May, 1909. It is estimated that the cost of the work during this year will be \$1,000.	In order to aid in the rapid development of agriculture in this new State, not less than \$3,000 should be devoted to soil surveys. Little work of this character has been done, and the demand is great for information about the soils and their value for various crops.
Salaries..... \$658.06		
Field expenses..... 416.57		
Total..... \$1,074.63		
Area surveyed in part during previous fiscal year.		
 Johnstown area (558 square miles surveyed).	 Oregon:	 Oregon:
Salaries..... \$726.66	In cooperation with the Reclamation Service, a survey has been completed of the lands included within the project of Klamath Falls. In addition to this survey, work will also be started during this fiscal year in Coos County. For carrying on this survey and that of the Klamath Falls project, it is estimated that the sum of \$2,250 will be required.	The prominence attained by certain sections as fruit-growing centers of the highest order, demands that the soils of these areas, as well as others, should be studied to determine the character of soils adapted to fruit production, and also, if possible, the new localities where such industries may find favorable soil conditions. The promised extension of railroads will open large tracts of land at present undeveloped, and to increase the knowledge of the soils in the State the sum of at least \$2,500 should be expended.
Field expenses..... 599.45		
Total..... 1,326.11		
Area surveyed in part during previous fiscal year.	 Pennsylvania:	 Pennsylvania:
 South Carolina:	Center County, 1,150 square miles; Berks County, 874 square miles.	The officers of the Pennsylvania State College of Agriculture and Experiment Station have requested that the Bureau of Soils should extend as rapidly as possible its soil-survey work within the State, in order that these surveys may become a basis for the general study of agricultural conditions which is being conducted by the state institutions, and in order that, as a result of these soil surveys, the state officials may have at hand the necessary data for advising the farmers of the different parts of the State in regard to the crop adaptation, fertilizer requirements, and best methods of management for the great diversity of soils within the State.
Lec County (153 square miles surveyed).	The soil survey of Center County, made at the request of the State College of Agriculture, has been completed, and in the spring of 1909 the survey of Berks County will be undertaken. The soil-survey work in Pennsylvania is being extended as rapidly as possible at the request not only of the State College and Experiment Station, but also of the State Horticultural Society, and of local organizations of farmers and fruit growers. The cost of the work in this State for the fiscal year 1909 will be approximately \$2,500.	In connection with the fruit industry, the horticultural society has also filed urgent requests for the continuation of this work, and in view of these requests to make the proper progress in soil-survey work, not less than \$3,500 should be expended in Pennsylvania during the fiscal year 1910.
Salaries..... \$373.07		
Field expenses..... 215.93		
Total..... 589.00		
Area surveyed in part during previous fiscal year.	 South Carolina:	 South Carolina:
 Oconee County (652 square miles surveyed).	Anderson County, 756 square miles; Horry County (in part) 500 square miles; Saluda County, 438 square miles.	There are on file from South Carolina requests for 21 different soil surveys, covering a total area of nearly 18,000 square miles and including practically all of the unsurveyed counties in the State. Requests from the State College of Agriculture and Experiment Station, in addition to those from numerous boards of trade and individual farmers, would indicate that not less than \$2,500 could be profitably expended in the prosecution of soil-survey work in South Carolina.
Salaries..... \$1,039.99	These three counties were selected from among a large number of requests for additional soil-survey work in South Carolina, and the completion of this work during the fiscal year 1909 will cost approximately \$3,500.	
Field expenses..... 657.55		
Total..... 1,697.54		
 Sumter County (154 square miles surveyed).		
Salaries..... \$375.00		
Field expenses..... 217.85		
Total..... 592.85		
Area surveyed in part during previous fiscal year.		
 South Dakota:		 South Dakota:
Belle Fourche area (98 square miles surveyed).		In this State the sum of \$2,000 should be devoted to soil-survey work to serve as a further aid in developing the agricultural industries of the State on a proper and safe basis. The area surveyed should preferably be east of the one-hundredth meridian, since all of the western part of the State will be included in the reconnaissance survey of the Great Plains region.
Salaries..... \$426.66		
Field expenses..... 315.54		
Total..... 742.20		
Area surveyed in part during previous fiscal year.		

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Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Soil investigations, 1908, \$170,000—Continued.</i>	<i>Soil investigations, 1909, \$200,000—Continued.</i>	<i>Soil investigations, 1910, \$252,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>
Tennessee:	Tennessee:	Tennessee:
Giles County (599 square miles surveyed).	Coffee County, 442 square miles;	During the fiscal year 1910 not less than \$2,500 should be appropriated for the prosecution of soil-survey work in the different parts of the State of Tennessee. From this State there are on file requests for soil surveys to cover 28 different counties, and the work should be pushed as rapidly as funds are made available.
Salaries..... \$905.00	Overton County, 459 square miles;	
Field expenses..... 558.04	Sumner County, 520 square miles.	
Total..... \$1,463.04	These counties were selected from among a large number of requests for additional soil-survey work in the State of Tennessee. The completion of this work in the fiscal year 1909 will cost approximately \$2,750.	
Area surveyed in part during previous fiscal year.		
Overton County:		
Salaries..... \$73.33		
Field expenses..... 65.89		
Total..... 139.22		
Work begun May 7, 1908. Temporarily stopped on May 28, 1908. Survey to be completed during fiscal year 1909.		
Texas:	Texas:	Texas:
Corpus Christi area (400 square miles surveyed).	In compliance with the great number of demands for soil-survey work Grayson, Titus, Morris, and Camp counties have been selected, surveys of which will be completed at an estimated cost of \$4,500.	On account of the great number of areas (57 in all) that have been requested, and of the vast extent of land still undeveloped, not less than \$7,500 should be devoted to soil-survey work. Areas should be selected that will aid in the development of the trucking, fruit, rice, cigar, tobacco, sugar cane, cotton, and stock-raising industries, and that will also furnish additional information to aid in the correlation of the soils of this great agricultural State.
Salaries..... \$830.55		
Field expenses..... 569.87		
Total..... 1,400.42		
Franklin County (325 square miles surveyed).		
Salaries..... \$770.00		
Field expenses..... 556.29		
Total..... 1,326.29		
		Vermont:
		Only one soil survey has been made in the State of Vermont, and in order that the relationship of the soils to those of other northeastern States may be ascertained, and especially in order that the existence of soils suitable to the production of tobacco and alfalfa may be ascertained, not less than \$1,100 should be expended in the extension of soil-survey work in this State.
		There are on file at the Bureau of Soils requests for soil surveys of 23 additional counties in the State of Virginia. These requests cover all portions of the State. They represent a desire for additional soil-survey work to outline the existence of soils in the eastern portion of the State suitable for the extension of the trucking and market garden interests; in central Virginia for the extension of general farming and stock-raising activities, and in western Virginia for the extension of the well-developed fruit industry of that region. The State College of Agriculture and Experiment Station, through its officers, have expressed a desire for the extension of this work to serve as a basis for building up the agricultural interests of the State and for making these known throughout other portions of the United States. In order that this work may be properly extended during the fiscal year 1910, not less than \$2,500 should be allotted for soil-survey work in this State.
Virginia:	Virginia:	Washington:
Montgomery County (353 square miles surveyed).	Campbell County, 554 square miles; Washington County, 605 square miles.	Not less than \$2,500 should be devoted to soil surveys in this State. The first purpose of this work should be to furnish a basis upon which to compare the soils of new sections now undergoing development with those of the older sections in which such wonderful progress has been made. It is believed that there are many localities where the prospects for apple and fruit culture are equal to those of the Yakima and Hood River districts, and that there are in the Puget Sound region large tracts of land that will bring as great
Salaries..... \$729.44	Soil-survey work was assigned in these two counties in response to numerous requests for additional work in the central and western parts of the State, both in the interest of the fruit growers and of general farming. The work in both counties will be undertaken during the season of 1909, and approximately \$2,500 will be expended during this fiscal year.	
Field expenses..... 444.59		
Total..... 1,174.03		
Area surveyed in part during previous fiscal year.		
Washington:		
Bellingham area (361 square miles surveyed)—		
Salaries..... \$950.00		
Field expenses..... 535.86		
Total..... 1,485.86		
Area surveyed in part during previous fiscal year.		

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Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Soil investigations, 1908, \$170,000—Continued.</i>	<i>Soil investigations, 1909—\$200,000—Continued</i>	<i>Soil investigations, 1910, \$252,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Detailed surveys—Continued.	Detailed surveys—Continued.	Detailed surveys—Continued.
West Virginia:	West Virginia:	West Virginia:
Middlebourne area (806 square miles surveyed)—	Woods, Pleasants, and Ritchie counties, 956 square miles. A soil survey of these counties was undertaken in cooperation with the West Virginia Geological Survey, in order to furnish information regarding the soil resources of these counties, to be published by the Geological Survey in connection with their reports upon the other economic resources of that region. Additional work will be taken up in the spring of 1909 in counties to be suggested by the West Virginia Geological Survey. Under the cooperative agreement between that office and the Bureau of Soils, the soil experts are furnished by the Bureau of Soils, and their actual field expenses are paid by the West Virginia organization. About \$1,000 will, therefore, be expended in soil-survey work in that State during the fiscal year 1909.	returns from the sale of vegetables and fruits as some of the famous districts already established. More soil surveys are needed to ascertain these favored localities.
Salaries.....		West Virginia:
Area surveyed in part during previous fiscal year.		The West Virginia Geological Survey is cooperating with the Bureau of Soils in the prosecution of soil-survey work in that State, paying all of the field expenses incurred in this work, while the Bureau of Soils assigns the soil experts engaged in the work and pays their salaries. As in the case of Maryland, the reports upon the soil resources of the different counties investigated are republished by the West Virginia Geological Survey as a portion of their annual report upon the economic resources of the various counties studied. In order that this cooperation may proceed, not less than \$1,500 should be allotted for the payment of the salaries of the soil experts assigned to the State of West Virginia.
Area surveyed in cooperation with West Virginia Geological Survey.		Wisconsin:
Parkersburg area (162 square miles surveyed)—		Ten areas have been requested in this State by prominent citizens and societies interested in developing the tobacco, dairy, and fruit industries. Many requests have also been made for surveys in those sections where the pine forests have been removed and where poor drainage still interferes with successful agriculture. To aid the people interested in these worthy enterprises, not less than \$2,500 should be expended on soil-survey work in this State.
Salaries.....		Wyoming:
Field expenses.....		It is proposed to devote \$1,500 to survey work in this State, which up to the present time has had but one soil survey. The recent construction of private and federal irrigation systems has thrown open to settlement soils concerning the nature and productiveness of which but little is known.
Total.....		Salaries of men while actually engaged in the preparation of their field reports, while en route between assignments, while absent on annual and sick leave, when assigned to headquarters, when engaged in library research work in connection with the soil-survey projects.....
Work begun May 7, 1908, and will be completed during fiscal year 1909.		the soil-survey projects.....
		Miscellaneous field supplies, etc....
		Traveling expenses between areas.....
Salaries of men while actually engaged in the preparation of their field reports, while en route between assignments, while absent on annual and sick leave, when assigned to headquarters, when engaged in library research work in connection with the soil-survey projects.....	Salaries of men while actually engaged in the preparation of their field reports, while en route between assignments, while absent on annual and sick leave, when assigned to headquarters, when engaged in library research work in connection with the soil-survey projects.....	Reconnaissance surveys.
		This work comprises the rapid surveying, mapping, and classifying of the soils of extensive areas in different parts of the country, the preparation of reports containing descriptions of the various soils, their character, origin, and value for agricultural or other purposes, and of the conditions existing in the areas surveyed. The work is quite similar in character and in the results achieved to the detailed soil survey described under the general heading "Soil survey." Reconnaissance surveys, however, are more general in character and the maps showing the distribution of the broad classes
Miscellaneous field supplies, etc.....	Miscellaneous field supplies, etc....	
Traveling expenses between areas.....	Traveling expenses between areas.....	
Reconnaissance surveys.	Reconnaissance surveys.	
North Dakota:		
Great Plains region—		
Salaries.....		
Field expenses.....		
Total.....		
Work begun May 31, 1908. To be continued during fiscal year 1909.		

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Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Soil investigations, 1908, \$170,000—Continued.</i>	<i>Soil investigations, 1909, \$200,000—Continued.</i>	<i>Soil investigations, 1910, \$152,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Reconnaissance surveys—Continued.	Reconnaissance surveys—Continued.	Reconnaissance surveys—Continued.
Pennsylvania:	of soils are on the scale of 6 miles to the inch. This work is of especial value in sections of country where there still remain considerable bodies of land not at present devoted to farming purposes, since in a short time a general idea of the agricultural value of the land can be formed and the crop adaptation of the soils worked out on general lines.	
Appalachian region—	At present, reconnaissance surveys are being carried on in two important regions; one in the Great Plains region, and one in the Appalachian Mountain and Plateau region. In the Great Plains region, the survey of that portion of North Dakota west of the one-hundredth meridian was undertaken. After the completion of this area of approximately 40,000 square miles, the field force will be transferred to south Texas for winter assignment, returning with the advent of favorable weather in the spring of 1909 to undertake the survey of eastern Montana. In the Appalachian region work was started in northwestern Pennsylvania with the reasonable expectation that by the close of the field season an area of about 10,000 square miles would be completed, after which, on account of severe weather conditions, field work would have to be postponed until the spring of 1909.	
Salaries..... \$100.00	Administration: This work involves the arrangement of the field parties, the issuing of instructions and information necessary for the proper conduct of the field work, and in general the supervision of details of organization and management of the field parties, and involves some inspection work:	Administration:
Field expenses..... 49.32	Salaries..... \$2,040.00	Salaries..... \$2,060.00
Total..... \$149.32	Traveling expenses. 1,360.00	Traveling expenses... 1,375.00
Work begun in June, 1908, and will be continued during fiscal year 1909.	Total..... \$3,400.00	Total..... \$3,435.00
	Inspection and correlation: This work involves the inspection of the work of the soil survey parties in the field, and the proper correlation of the soils, and insures uniformity and thoroughness in the methods of the field parties and accuracy in determining the proper relationship of the soils mapped in the several areas that have been surveyed. An inspection is made of each area while the soil survey party is still at work and all reports are finally reviewed by the assistant in charge to see that the correlation, description, and the naming of the soils are correct in all particulars:	Inspection and correlation:
	Salaries..... \$1,740.00	Salaries..... \$2,560.00
	Traveling expenses. 1,160.00	Traveling expenses.... 1,705.00
	Total..... 2,900.00	Total..... 4,265.00
	Great Plains region: It is estimated that during this fiscal year the sum of \$39,200 will be expended in actual field work. During the past summer an area of approximately 40,000 square miles was completed in western North Dakota. The field force was then transferred to southern Texas, and an area of approximately 15,000 square miles will be completed during the winter months, and upon the advent of spring the party will be trans-	Great Plains region: It is estimated that during this fiscal year the sum of \$37,300 will be expended in actual field work. The reconnaissance survey of eastern Montana will be completed, after which the field force will be transferred to the semiarid portion of Texas to continue the reconnaissance survey in that region. Upon the completion of a large area in Texas the force will be transferred on or about May 1, 1910, to

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Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<p><i>Soil investigations, 1909, \$170,000—Continued.</i></p> <p>PROJECTS—Continued.</p> <p><i>Reconnaissance surveys—Continued.</i></p>	<p><i>Soil investigations, 1909, \$200,000—Continued.</i></p> <p>PROJECTS—Continued.</p> <p><i>Reconnaissance surveys—Continued.</i></p> <p>ferred to eastern Montana to survey as much as possible of the semiarid portion of that State.</p> <p>Appalachian region: The soil survey work in this region was begun in northwestern Pennsylvania in June, 1908. Work on this project will necessarily be suspended during the winter months on account of climatic conditions, but during this fiscal year about 10,000 square miles will be included in the survey which will be made at an expense of approximately \$5,000.</p> <p>Salaries of men while actually engaged in the preparation of their field reports, while en route between assignments, while absent on annual and sick leave, when assigned to headquarters, when engaged in library research work in connection with the reconnaissance survey projects..... \$3,000.00</p> <p>Traveling expenses between assignments..... 1,000.00</p> <p>Miscellaneous field supplies, etc... 500.00</p>	<p><i>Soil investigations, 1910, \$152,500—Continued.</i></p> <p>PROJECTS—Continued.</p> <p><i>Reconnaissance surveys—Continued.</i></p> <p>western South Dakota to make a reconnaissance survey of that region.</p> <p>Appalachian region: Reconnaissance survey work in the State of Pennsylvania will be continued during the fiscal year 1910, and, if possible, additional work will be undertaken in the western part of the State of Maryland. The cost of this work, covering approximately 10,000 square miles, is estimated at \$5,000.</p> <p>Salaries of men while actually engaged in the preparation of their field reports, etc..... \$3,000.00</p> <p>Traveling expenses between assignments..... 1,300.00</p> <p>Miscellaneous field supplies, etc... 700.00</p>
<p><i>Soil management and soil utilization investigations, \$35,855.76.</i></p> <p>PROJECTS.</p> <p>This work has for its object the investigation of cultural methods required to put the soil into good condition for crops; the crop rotation suited to different soils to maintain them in their highest degree of fertility, and the fertilizer requirements of soils by greenhouse and field methods, as an aid in maintaining the fertility of the soil. The effect of different fertilizer constituents and their varying proportions in combinations upon different soils and different crops.</p> <p>Administration and inspection of field work: This work involves the general supervision and direction of the various lines of investigations, the issuing of instructions, and such inspection as the exigency of the work requires. It also includes the supplying of practical information in response to numerous inquiries. This is done either by sending publications, by direct letter, or by verbal interview.</p> <p>Salaries..... \$5,750.00</p> <p>Traveling expenses..... 995.76</p> <p>Total..... \$6,745.76</p> <p>Fertilizer requirements of soils: The object of this work involves a test of the fertilizer requirements of different crops upon soils sent in by the various field parties of the bureau, and by other bureaus of the department, as an aid to the better utilization of the soils.</p> <p>Salaries..... 1,225.26</p> <p>Plot experiments with fertilizers: This work involves the testing of the effects of different fertilizer treatments upon staple crops. It is being conducted under field conditions on the Arlington farm and includes the study of the effect of many substances not recognized as plant foods, but which have an important effect on the yield of crops.</p> <p>Salaries..... \$2,005.00</p> <p>Field expenses..... 243.40</p> <p>Total..... 2,248.40</p> <p>Location of school farms with reference to soil types and the preparation of plans for soil utilization: This work involves the inspection of proffered sites, and advice as to the location of agricultural school farms in the several States, with a view to their proper distribution as regards soil types, and agricultural conditions; the preparation of detailed soil maps of these farms, and of plans for the best utilization of the soils in school instruction in the principal agricultural industries of each locality.</p> <p>Salaries..... \$2,730.00</p> <p>Field expenses..... 996.83</p> <p>Total..... 3,726.83</p>	<p><i>Soil management and soil utilization investigations.</i></p> <p>This work was discontinued on June 30, 1908.</p>	<p><i>Soil management and soil utilization investigations.</i></p> <p>This work was discontinued on June 30, 1908.</p>

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Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<p><i>Soil management and soil utilization investigations, \$35,855.76—Continued.</i></p> <p>PROJECTS—continued.</p> <p>Investigations of fertilizers and crop rotation as a means of soil improvement: This work involves a study of various fertilizer constituents and combinations thereof, under field conditions, in conjunction with various crops and crop rotation. It is carried on in cooperation with farmers, and involves the study and analyses of a voluminous literature.</p> <p>Salaries..... \$2,450.00 Field expenses..... 513.20</p> <p>Total..... \$2,963.20</p> <p>Investigation and demonstration of efficient methods of soil management: This work involves a study in the field of the best systems of soil management and of crop adaptation in some of the important agricultural districts of the country, with a view to obtaining from the experience of farmers themselves, a better understanding of the best methods of soil management. The object is to disseminate among the people the information so gathered.</p> <p>Salaries..... \$11,575.00 Field expenses..... 6,063.61</p> <p>Total..... 17,638.61</p> <p>Salaries of men while engaged in the preparation of their field reports, and when assigned to headquarters..... 1,148.74</p> <p>Miscellaneous field and laboratory supplies..... 158.96</p> <p><i>Laboratory investigations, \$21,450.88.</i></p> <p>The laboratories furnish the physical and chemical data necessary for the interpretation of the field studies of the bureau. The amount of analytical work thus required has continued to increase with the growing requirements of the field investigations, augmented by increasing demands for such data from other bureaus and offices. Certain fundamental investigations have been conducted, called for by the problems in the field work and necessary to the understanding of the handling of soils and fertilizers.</p> <p>PROJECTS.</p> <p>Physical soil investigations, including:</p> <p>(a) Conservation of soil moisture. The object of this investigation was to determine the loss of water by evaporation from various soil types with different sorts of mulches, and under different physical conditions, due to different cultural methods, with a view to devising the best method of conserving the soil moisture in semi-humid regions.</p> <p>(b) Relation of soil moisture to physical condition of soils. The object of this investigation was to determine the effect of various moisture conditions upon the practical handling of the soil, with a view to putting it in the best condition for plant growth.</p> <p>(c) Flocculation, sedimentation, and erosion of soils. The object is to study soil erosion and methods for its prevention. The physical character of the soil is of prime importance in an investigation of the extent and rate of erosion; and a study of the physical condition and structure of soil is necessary to a complete understanding of the influence of organic and mineral fertilizers in promoting flocculation and sedimentation of various soil types.</p> <p>(d) Absorption of vapors and gases by soils. The object of this investigation was to determine the ability of different soil types to condense on the surface of the grains, water vapor, and other gases present in the soil atmosphere, especially the gaseous products of the decomposition of organic matter.</p> <p>(e) Retention and conservation of fertilizer ingredients by soils. This investigation had for its object the determination of the ability of different soil types to absorb the substance commonly employed in fertilizer practice. It has been shown that different soils possess widely different absorptive powers for the various fertilizer ingredients. The fact that there is this absorption is of the utmost importance in conserving for future use the excess of plant nutrients.</p> <p>(f) Leaching of soils. The rate of removal of plant food and other constituents from humid soils, and of the excess of soluble salts from the alkali soils, has been made the object of examination. The composition of drainage waters at successive stages of reclamation have indicated that much longer periods are necessary to remove some of the harmful ingredients than others, and that this leaching influences the physical structure of the soil. The different soil types are leached at very different rates, depending upon the texture, amount of organic matter, etc.</p>	<p><i>Soil management and soil utilization investigations—Continued.</i></p> <p>PROJECTS.</p> <p>Physical soil investigations:</p> <p>Salaries..... \$4,600.00 Laboratory supplies.. 500.00</p> <p>Total..... \$5,100.00</p> <p><i>Laboratory investigations, \$19,570.</i></p>	<p><i>Soil management and soil utilization investigations—Continued.</i></p> <p>PROJECTS.</p> <p>Physical soil investigations:</p> <p>Salaries..... \$4,600.00 Laboratory supplies.. 500.00</p> <p>Total..... \$5,100.00</p> <p><i>Laboratory investigations, \$19,600.</i></p>

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Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Laboratory investigations, \$21,450.88—Continued.</i>	<i>Laboratory investigations, \$19,570—Continued.</i>	<i>Laboratory investigations, \$19,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>(g) Wind movement of soils. The object of this investigation is to determine the extent of translocation of soil material by æolian agencies. It has been shown that the wind carries soil materials for hundreds and even thousand of miles, and at the place of precipitation of the soil material very great changes occur in the soil conditions. The wind is the most important agency in mixing the various rock-forming minerals in the soil.</p> <p>(h) Soil temperatures. The object of this work was to determine the power of various soils to transmit heat, and the influence of the moisture condition on this heat transmission. It has been found that a dry soil conducts heat very much slower than one moderately moist. This throws light upon the condition known by agriculturists as the "optimum moisture condition," the use of flooding in cranberry culture and similar crops, the choice of time for plowing, etc.</p> <p>Salaries..... \$4,196.67</p> <p>Laboratory supplies..... 500.00</p> <p>Total..... \$4,696.67</p> <p>Chemical investigation, including:</p> <p>(a) Phosphates of soils and fertilizers. The object of this investigation was to obtain more definite knowledge of the phosphates of soils and fertilizers, with special reference to their chemical character and chemical interactions which take place when phosphate fertilizers are added to the soil, with a view to explaining many observed phenomena of fertilizer practice and to suggest the kind of phosphate best adapted to any particular soil type.</p> <p>(b) Nitrogen-carrying fertilizers. The object of this investigation was to obtain more definite information regarding the amount and nature of nitrogen in various fertilizing materials, such as lime-nitrogen, cyanamid, sodium nitrate, etc.</p> <p>(c) Chemical and mineralogical composition of soil separates. The object of this study is to separate the soil into fractions according to the size of the particles, and to determine the chemical and mineralogical composition of the various separations of the different soil types. It was shown that there is a larger percentage of the mineral nutrients in the smaller grains, but that these mineral nutrients as well as the minerals from which they were derived are scattered through the grains of all sizes. The solution of these minerals in the soil moisture supplies the plant with its required nutrients.</p> <p>(d) Solubility of soil minerals. The object of this work is to investigate the rate at which different sized soil grains and different soil minerals dissolve in the soil moisture to supply growing crops with their needed nutrients.</p> <p>(e) Chemical properties of humus. Of all the soil constituents probably more has been written about humus than any of the other constituents. In spite of this, probably less has been definitely established than about any of the other constituents. The object of this work is therefore to clear up some of the contradictory views regarding humus and to find in what way it reacts upon the other materials of the soil, and affects both the physical and chemical properties of the soil.</p> <p>(f) Iron compounds of the soil. The object of this investigation is to determine whether the relative productive power of soils is due to the nature of the iron compounds in the red and yellow soils, or whether these colors are merely indicative of present or past conditions controlling not only the color of the iron compounds, but also other factors which are directly responsible for productivity.</p> <p>(g) Alkali soils. The object of this work is to determine the nature and composition of the harmful salts contained in alkali soils and of the irrigation and drainage waters from the soils, in order to aid the field parties in the reclamation of these soils, and to give information which will be of value in adopting suitable methods of reclamation and to assist in the selection of crops most resistant to the different kinds of alkali salts and to different combinations of these salts.</p> <p>(h) Investigation of routine methods of analysis. The object of this work is to devise and perfect the methods of physical and chemical analysis, so as to attain greater accuracy and speed, made necessary by the increasing amount of work and the increased demand for more detailed knowledge in solving soil problems.</p> <p>(i) Field demonstration. The object of this work is to demonstrate certain laboratory results in the field.</p> <p>Salaries..... \$8,849.44</p> <p>Traveling expenses..... 608.39</p> <p>Total..... 9,457.83</p>	<p>Chemical investigations:</p> <p>Salaries..... \$9,300.00</p> <p>Traveling expenses... 550.00</p> <p>Total..... \$9,850.00</p>	<p>Chemical investigations:</p> <p>Salaries..... \$9,300.00</p> <p>Traveling expenses... 550.00</p> <p>Total..... \$9,850.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Laboratory investigations, \$21,450.88—Continued.</i>	<i>Laboratory investigations, \$19,570—Continued.</i>	<i>Laboratory investigations, \$19,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Mechanical analysis of soil types: The object of this work is to separate the soils into the various sizes of soil particles, sand, silt, and clay. This is necessary in the field study and survey of soils to determine the proper classifications and correlations of the soil types in the various areas in which the soil survey is being conducted. During the year more than 2,100 samples were sent in for analysis by the soil-survey parties, and several hundred samples have been analyzed for other bureaus and offices of the department.	Mechanical analyses of soil types: This project is included in soil-survey allotments.	
Salaries..... \$3,174.00		
Unclassified analytical work: This work comprises the analysis of miscellaneous samples of soils, fertilizers, irrigation and drainage waters, etc., of which about 350 have been examined during the year. There is always a certain amount of such miscellaneous work sent in by the field parties of the bureau and other bureaus and departments, and these analyses throw more or less light upon specific soil conditions.	Unclassified analytical work:	Unclassified analytical work:
Salaries..... \$2,680.00	Salaries..... \$3,000.00	Salaries..... \$3,000.00
Laboratory supplies..... 342.88	Laboratory supplies.. 420.00	Laboratory supplies.. 450.00
Total..... 3,022.88	Total..... \$3,420.00	Total..... \$3,450.00
Designing and repairing apparatus for field and laboratory studies: The laboratory investigations of the physical and chemical properties of soils and the field tests require special apparatus designed and constructed under the immediate supervision of the men engaged in the work.	Designing and repairing apparatus for field and laboratory studies:	Designing and repairing apparatus for field and laboratory studies:
Salaries..... 1,100.00	Salaries..... 1,200.00	Salaries..... 1,200.00
<i>Soil fertility investigations, \$16,347.22.</i>	<i>Soil fertility investigations, \$18,430.</i>	<i>Soil fertility investigations, \$18,400.</i>
PROJECTS.	PROJECTS.	PROJECTS.
Investigations of the causes of and remedy for infertility in certain soils and of the low crop yields arising in many soils from improper methods of cultivation and cropping; the separation, identification, and study of organic substances found in unproductive soils and their correction by mechanical handling, by use of fertilizers, and by other methods available to the farmer.		
Investigation of the maintenance of soil fertility: This project is to investigate the permanency of soil fertility of the important soil types of the United States, with a view to avoid soil deterioration by improper methods of cultivation and cropping. Especial attention has been paid to the staple crops—corn, wheat, oats, potatoes, etc.—which are proving to have very injurious effects on the soil when continually grown on the same land. In laboratory investigations the nature of the soils are being studied with a view to determine the effect of these crops upon the various factors which influence soil productivity. By a proper understanding of these factors in the laboratory and in the field the best systems of soil management and crop rotation will be devised for successful agriculture on the various soil types.	Investigation of the maintenance of soil fertility:	Investigation of the maintenance of soil fertility:
Salaries..... \$2,750.00	Salaries..... \$3,200.00	Salaries..... \$3,200.00
Investigation of the causes of unproductive soils: This project is to determine in soils the causes or factors of low crop production. The deterioration of soils results from various conditions, such as poor drainage and aeration, and from poor cultivation, improper succession of crops, or improper crop adaptation. It has already been shown that the poor qualities of unproductive soils are not always due to a lack of mineral plant food, but often to the presence of substances actually hindering plant growth. Extended investigations have been carried on within fertile soils in determining the presence of toxic bodies, in isolating and identifying these bodies, and in studying their properties. The toxic bodies found are carbon compounds, and it has been shown that the productiveness of a soil depends largely upon the condition of the organic matter in the soil and the processes which are at work in destroying the plant remains. The properties of these and related compounds in soils have been studied with reference to their effect on plant growth and much valuable information obtained concerning the processes of decay of organic matter in soils.	Investigation of the causes of unproductive soils:	Investigation of the causes of unproductive soils:
Salaries..... 2,750.00	Salaries..... 3,200.00	Salaries..... 3,200.00
Investigation of the organic origin of unproductivity in soils and the effect of green manuring: The origin of the toxic substances and the conditions which lead to their formation have been investigated; namely, whether they are formed by the accumulation of root excreta in the soil under a one-crop system, where they are not taken care of by natural process of destruction and decay, due to improper drainage, aeration or cultivation; whether they are the products of germination; of bacterial or other life processes within the soil; or whether they are formed by the decomposition of vegetable matter under unfavorable conditions in the soil. The effects of green and stable manuring and the products of their decom-	Investigation of the organic origin of unproductivity in soils and the effect of green manuring:	Investigation of the organic origin of unproductivity in soils and the effect of green manuring:
	Salaries..... 3,200.00	Salaries..... 3,200.00

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
Soil fertility investigations, \$16,347.22—Continued.	Soil fertility investigations, \$18,430—Continued.	Soil fertility investigations, \$18,400—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
position in the soil have been studied to determine the manner of a relative effectiveness in overcoming unfavorable conditions in soils.		
Salaries.....		
Investigation of means for improvement of unproductive soils: The object of this line of investigations has been the determination of the conditions and treatment necessary to attack or destroy unfavorable organic materials in the soil, rendering them harmless to crops. Among these has been the action of fertilizers; the action of plant roots; the effect of cultivation with its resulting aeration and oxidation, and also the influence of crop rotation and the action of substances not regarded as furnishing plant foods. Attention is also being paid to the remedy of conditions which cause the formation of these unfavorable bodies.	Investigation of means for improvement of unproductive soils:	Investigation of means for improvement of unproductive soils:
Salaries.....	Salaries.....	Salaries.....
\$2,750.00	\$3,400.00	\$3,400.00
Investigation of the effect of fertilizers on soils: The object of this work is to determine the function of fertilizers in various soil types and crops. It has already been demonstrated that substances commonly used as fertilizers have, in addition to their functions as plant nutrients, a well-defined power to overcome and destroy harmful bodies in the soil; facts of distinct value in the study of soil and fertilizer problems. This investigation includes the time and mode of action of fertilizers on harmful soil constituents, the best time of application, the proportions of the fertilizing constituents, and the effect of fertilizers under different climatic conditions and with different crops, with a view to establishing the best systems of fertilization consistent with economy.	Investigation of the effect of fertilizers on soils:	Investigation of the effect of fertilizers on soils:
Salaries.....	Salaries.....	Salaries.....
3,213.90	2,300.00	2,300.00
Field investigations of soil fertility problems in cooperation with experiment stations: Cooperation has been arranged with a number of the experiment stations to investigate local cases of infertile soils, or of soil deterioration; notable among these is the study of flax-sick soil in North Dakota, potato-sick soil in California, the exhaustion of soils under a rotation of crops which has been carried on for twenty-five years at the Pennsylvania station.	Field investigations of soil fertility problems in cooperation with experiment stations:	Field investigations of soil fertility problems in cooperation with experiment stations:
Salaries.....	Salaries.....	Salaries.....
1,836.10	2,200.00	2,200.00
Traveling expenses.....	Traveling expenses.....	Traveling expenses.....
648.47	730.00	700.00
Total.....	Total.....	Total.....
2,848.46	2,930.00	2,900.00
Miscellaneous field and laboratory supplies.....	Miscellaneous field and laboratory supplies.....	Miscellaneous field and laboratory supplies.....
198.76	200.00	200.00
Soil erosion, \$4,206.69.	Soil erosion, \$5,000.	Soil erosion, \$5,000.
This project has for its object the investigations of the extent of damage arising from the erosion of cultivated soils, and the most practical remedial measures for checking the same. It is, in effect, to study the reasons of and remedies for one of the most important causes of the loss of soil fertility. To it may be charged the wasting of wide areas of the arable soils of the United States, and the evil does not end there for the products of erosion prove a source of menace to and interference with the navigation of the waterways of the country. Desultory efforts have been made, through various methods of treatment, to serve the soils and prevent this waste, but it is now proposed that a systematic study should be made of different soils and of practical methods of preventing their bodily removal from the fields.		
Reconnaissance study of the effect of erosion on agricultural lands:	Reconnaissance study of the effect of erosion on agricultural lands:	Reconnaissance study of the effect of erosion on agricultural lands:
Salaries.....	Salaries.....	Salaries.....
\$3,000.00	\$3,000.00	\$3,000.00
Traveling expenses.....	Traveling expenses.....	Traveling expenses.....
1,206.69	2,000.00	2,000.00
Total.....	Total.....	Total.....
\$4,206.69	\$5,000.00	\$5,000.00
Administration.	Administration.	Administration.
Miscellaneous supplies, laboratory apparatus, laboratory equipment for new building, and miscellaneous and contingent expenses for maintenance and operation of offices and laboratories:	Miscellaneous supplies, laboratory apparatus, and miscellaneous and contingent expenses for maintenance and operation of offices and laboratories in Washington, D. C.....	Miscellaneous supplies, laboratory apparatus, and miscellaneous and contingent expenses for maintenance and operation of offices and laboratories in Washington, D. C.....
Rent.....		
\$3,486.66	\$7,000.00	\$9,600.00
Telephone.....		
20.07		
Telegraph.....		
82.44		
Freight.....		
34.32		
Express.....		
187.10		
Gas and electricity.....		
627.70		
Furniture.....		
823.34		
Miscellaneous supplies, apparatus, stationery, typewriters, laboratory apparatus for new building, etc.....		
5,373.64		
1 laborer, at \$600.....		
600.00		
1 laborer, at \$300.....		
300.00		

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Administration—Continued.</i>	<i>Administration—Continued.</i>	<i>Administration—Continued.</i>
Salaries of plumbers and laborers while installing laboratory apparatus in new building..... \$621.75		
Total..... \$12,157.02		
Total of all appropriations for Bureau of Soils.. 206,980.00	Total of all appropriations for Bureau of Soils (an increase over 1908 of \$27,720)..... \$234,700.00	Total amount estimated for Bureau of Soils (an increase over 1909 of \$52,400)..... \$287,100.00
Total expenditures to September 30, 1908..... 203,920.18		
Outstanding liabilities on September 30, 1908 (estimated)... 1,806.62		
Balance to be turned back in Treasury (estimated)..... 1,253.20		

BUREAU OF ENTOMOLOGY.

Salaries, Bureau of Entomology, 1908, \$22,210.		
Howard, L. O.....	Chief of bureau, at \$3,250	\$3,250.00
Clifton, R. S.....	Chief clerk, at \$1,800.....	1,800.00
Althouse, R. C.....	Clerk, class two.....	1,400.00
Champney, Mary G.....	Clerk, class two.....	1,400.00
Colcord, Mabel.....	Clerk, class two.....	1,400.00
Tastet, W. F.....	Clerk, class two.....	1,400.00
Howenstein, Lillian L.....	Artist, at \$1,400.....	1,384.44
Sasscer, E. R.....	Clerk, class one.....	1,200.00
Strauss, John F.....	Clerk, class one.....	1,200.00
Wood, Elmer C.....	Clerk, class one.....	1,200.00
Condit, Ira J.....	Clerk, at \$1,000.....	725.00
Cunningham, Boyd C.....	Clerk, at \$1,000.....	1,000.00
Keleher, T. A.....	Clerk, at \$1,000.....	1,000.00
Marks, Jessie E.....	Clerk, at \$1,000.....	1,000.00
Menagh, Charles S.....	Clerk, at \$1,000.....	1,000.00
Vedder, Frank W.....	Clerk, at \$1,000.....	980.56
Borochoff, Jacob M.....	Messenger, at \$840.....	718.67
Canatsey, William S.....	Messenger, at \$720.....	660.00
Borochoff, Jacob M.....	Messenger, at \$720.....	60.00
Fagan, Geo. M.....		
Total.....		21,973.67
Unexpended balance.....		236.33
Total of above appropriation.....		22,210.00
The above force performed the following duties:		
Administrative and executive:		
1 entomologist.....	\$3,250.00	
1 chief clerk.....	1,800.00	5,050.00
Correspondence, files, and records:		
3 clerks, class two, \$1,400.....	4,200.00	
1 clerk, class one, \$1,200.....	1,200.00	
5 clerks, at \$1,000.....	5,000.00	10,400.00
Accounts and property:		
1 clerk, class one.....	1,200.00	
Library:		
1 clerk, class two.....	1,400.00	
Illustrations:		
1 artist, at \$1,400.....	1,400.00	
1 clerk, class one, \$1,200.....	1,200.00	2,600.00
Messenger service:		
1 messenger, at \$840.....	840.00	
1 messenger, at \$720.....	720.00	1,560.00
Total.....		22,210.00

Salaries, Bureau of Entomology, 1909, \$26,160.		
1 entomologist, who shall be chief of bureau.....	\$4,000.00	
1 chief clerk.....	1,800.00	
2 clerks, class three.....	3,200.00	
4 clerks, class two.....	5,600.00	
1 artist.....	1,400.00	
3 clerks, class one.....	3,600.00	
5 clerks, at \$1,000.....	5,000.00	
1 messenger.....	840.00	
1 messenger.....	720.00	
Total of above appropriation (an increase over 1908 of \$3,950).....	26,160.00	
The above force are performing the following duties:		
Administrative and executive:		
1 chief of bureau.....	\$4,000.00	
1 chief clerk.....	1,800.00	5,800.00
Correspondence, files, and records:		
2 clerks, class three, \$1,600.....	3,200.00	
2 clerks, class two, \$1,400.....	2,800.00	
2 clerks, class one, \$1,200.....	2,400.00	
4 clerks, at \$1,000.....	4,000.00	12,400.00
Accounts and property:		
1 clerk, class two, \$1,400.....	1,400.00	
1 clerk, class one, \$1,200.....	1,200.00	2,600.00
Library:		
1 clerk, class two.....	1,400.00	
Illustrations:		
1 artist.....	1,400.00	
Editorial:		
1 clerk, at \$1,000.....	1,000.00	
Messenger service:		
1 messenger, at \$840.....	840.00	
1 messenger, at \$720.....	720.00	1,560.00
Total.....		26,160.00

Salaries, Bureau of Entomology, 1910, \$27,880.		
1 entomologist, who shall be chief of bureau.....	\$4,000.00	
1 chief clerk.....	1,800.00	
2 clerks, class three.....	3,200.00	
4 clerks, class two.....	5,600.00	
NOTE.—One artist, at \$1,400, transferred to lump fund for general expenses.		
4 clerks, class one, (increase of 1 by transfer from lump fund for general expenses).....	4,800.00	
5 clerks, at \$1,000 each.....	5,000.00	
1 messenger.....	840.00	
1 messenger.....	720.00	
1 laborer (by transfer from lump fund for general expenses).....	720.00	
2 charwomen, at \$480 each (by transfer from lump fund for general expenses).....	960.00	
1 charwoman (by transfer from lump fund for general expenses).....	240.00	
Total amount estimated (an apparent increase over 1909 of \$1,720).....	27,880.00	
NOTE.—The apparent increase is \$1,720, but not considering the places transferred to and from the lump fund for general expenses there is no actual increase.		
The above force will perform the following duties:		
Administrative and executive:		
1 chief of bureau.....	\$4,000.00	
1 chief clerk.....	1,800.00	5,800.00
Correspondence, files, and records:		
2 clerks, class three, \$1,600.....	3,200.00	
2 clerks, class two, \$1,400.....	2,800.00	
3 clerks, class one, \$1,200.....	3,600.00	
4 clerks, at \$1,000.....	4,000.00	13,600.00
Accounts and property:		
1 clerk, class two, \$1,400.....	1,400.00	
1 clerk, class one, \$1,200.....	1,200.00	2,600.00
Library:		
1 clerk, class two.....	1,400.00	
Editorial:		
1 clerk, at \$1,000.....	1,000.00	
Messenger service:		
1 messenger, at \$840.....	840.00	
1 messenger, at \$720.....	720.00	1,560.00
Janitor and labor service:		
1 laborer, at \$720.....	720.00	
2 charwomen, at \$480.....	960.00	
1 charwoman, at \$240.....	240.00	1,920.00
Total.....		27,880.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Entomological investigations, 1908, \$113,800.</i>	<i>Entomological investigations, 1909, \$158,800.</i>	<i>Entomological investigations, 1910, \$199,800.</i>
Salaries: In Washington..... Out of Washington..... Stationery..... Miscellaneous supplies and services, equipment, books, machinery, etc..... Furniture..... Fuel..... Freight..... Express..... Telegraph..... Telephone..... Rent..... Gas and electricity..... Apparatus, instruments, and laboratory material..... Travel, station, and field expenses	Salaries: In Washington..... Out of Washington..... Stationery..... Miscellaneous supplies and services, equipment, books, machinery, etc..... Furniture..... Freight..... Express..... Telegraph..... Telephone..... Apparatus, instruments, and laboratory material..... Travel, station, and field expenses ..	Salaries: In Washington..... Out of Washington..... Stationery..... Miscellaneous supplies and services, equipment, books, machinery, etc..... Furniture..... Freight..... Express..... Telegraph..... Telephone..... Apparatus, instruments, and laboratory material..... Travel, station, and field expenses ..
Total expenditure to September 30, 1908..... Less repayment to credit of appropriation..... Total net expenditures to September 30, 1908..... Outstanding liabilities on September 30, 1908 (estimated).... Balance to be turned back in Treasury (estimated)..... Total amount of above appropriation	Total amount of above appropriation (an increase over 1908 of \$45,000)..... Total amount of above appropriation (an increase over 1908 of \$45,000).....	Total amount estimated (an increase over 1909 of \$41,000..... Total amount estimated (an increase over 1909 of \$41,000.....
NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, were necessary in prosecuting the important work of the Bureau of Entomology. This work was divided into the following projects:	NOTE.—The above expenditures, classified in accordance with the suggestions of the congressional committee on expenditures for this department, are being incurred in prosecuting the important work of the Bureau of Entomology. This work is divided into the following projects:	NOTE.—The above estimates of expenditures, classified in accordance with the suggestions of the congressional committee on expenditures for this department, have been submitted as necessary for prosecuting the important work of the Bureau of Entomology. This work will be divided into the following projects:
PROJECTS.	PROJECTS.	PROJECTS.
(1) Importation of useful insects. Under the head of this project efforts are being made, largely in Europe, to import the parasites of such injurious foreign insects as have become acclimatized in this country. The importation of the parasites of the gipsy moth and the brown-tail moth are considered under a separate project as a part of the special emergency appropriation to prevent the further spread of the gipsy moth and the brown-tail moth. Aside from this, specific efforts are being made in Europe to secure the parasites of the codling moth, and large numbers of wintering cocoons of this insect are being sent from parts of Germany with the hope of rearing the parasites in this country and distributing them in American orchards. Efforts are also being made to import the recently discovered European parasites of the imported elm leaf beetle from portions of France. In addition to these items search is still being made, as opportunity offers, for Central American parasites of the cotton boll weevil, and, by the help of correspondents, for Asiatic parasites of scale insects supposed to have been imported into this country. Importations are also being made from Europe of beneficial ladybird beetles that feed upon plant lice, since many of the American plant lice have been brought from Europe. Other beneficial insects are being searched for and imported where possible.....	(1) Importation of useful insects. This project is explained in column 1 of this sheet. Amount allotted.....	(1) Importation of useful insects. This project is explained in column 1 of this sheet. Amount allotted.....
(2) Forest insect investigations. The object of this line of work is to conduct original investigations on the subject of insects damaging forests, in order to determine which are the principal insect enemies of forests and forest products, the character and extent of the problems which, on account of the losses involved, demand especial attention, and the more important facts in the life and habits of the destructive insects, local forest management, lumbering operations, beneficial insects, and other natural influences upon which to base conclusions and recommendations relating to practical methods of preventing losses. It has already been demonstrated by this work that a large per cent of the losses caused by insect depredations on the forests can be saved through ordinary business and forestry management with little or no ultimate expenses to the owners or producers. The work has been well received and is being carried on actively. Many individual projects are under way in the course of this work, and promise much more than commensurate results.....	(2) Forest insect investigations. This project is explained in column 1 of this sheet. Amount allotted.....	(2) Forest insect investigations. This project is explained in column 1 of this sheet. Amount allotted.....
(3) Deciduous fruit insect investigations. Under this section of the work of the bureau the general subject of insects damaging deciduous fruits and vineyards in the United States has been carried on. Many individual projects are involved. Some of the most important of these have been considerably enlarged and additional ones have been undertaken. Field stations are maintained in regions largely devoted to fruit culture, and these stations are located so as to represent as great a range as possible of climatic conditions.	(3) Deciduous fruit insect investigations. This project is explained in column 1 of this sheet. Amount allotted.....	(3) Deciduous fruit insect investigations. This project is explained in column 1 of this sheet. Amount allotted.....

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Entomological investigations, 1908, \$115,800—Continued.</i>	<i>Entomological investigations, 1909, \$153,800—Continued.</i>	<i>Entomological investigations, 1910, \$199,800—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Among the projects now in hand under this heading are investigations of the lime-sulphur-salt wash, codling moth investigations, pear thrips investigations, plum curculio investigations, investigations of the grape-root worm and berry moth, and peach borer investigations. Together with these many other fruit insects of less importance are being studied and practical control work is being demonstrated in the field. The demand for further investigation of the pear thrips in California and the grape-root worm and the grape-berry moth in the Great Lakes region is especially strong.		
(4) Investigations of insects injurious to truck crops and stored products. In the past the investigations of insects of this class have been largely confined to such forms as depredate on truck crops in the District of Columbia and nearby points in Maryland and Virginia. Owing to an increasing demand from truck growers all over the United States for information in regard to other insect enemies, this work has been largely extended, and investigations of a remedial nature are now under way in Florida and in Texas, while in the West the principal sugar-beet insects are being studied. This work has proven of much value and there is strong demand for its continuance and enlargement. An important project under this heading is that of insects affecting stored grain and other stored vegetables and animal products. These insects have been under observation since 1893, but the life histories of all of these are not thoroughly worked out, and further investigation is demanded. Extensive remedial investigation, especially with relation to the hydrocyanic-acid gas and carbon bisulphid, is still needed.	(4) Investigations of insects injurious to truck crops and stored products. This project is explained in column 1 of this sheet.	(4) Investigations of insects injurious to truck crops and stored products. This project is explained in column 1 of this sheet.
\$20,000.00	\$11,250.00	\$11,250.00
(5) Cereal and forage plant insect investigations. This work has been actively followed for several years past. Extensive cooperative experiments have been undertaken throughout the wheat-growing belt in regard to the Hessian fly. Important facts have been gained with regard to the remedial work and most important discoveries have been made and are still being made in regard to the practical handling of the parasites of this destructive insect. The same may be said of joint worms, the so-called green bug, and insects damaging winter wheat to a serious extent. The whole subject of insects affecting forage and cereal plants is under investigation and many subsidiary lines of work are being followed with promise of practical results of value.	(5) Cereal and forage plant insect investigations. This project is explained in column 1 of this sheet. Amount allotted.....	(5) Cereal and forage plant insect investigations. This project is explained in column 1 of this sheet. Amount allotted.....
7,750.00	21,000.00	21,000.00
(6) Scale insect investigations. Scale insects are among the chief depredators on both deciduous and nondeciduous fruits, and, owing to their close relationship and the similarity of means of control, form a special subject of investigation. This work includes a study of the life history of the insects, means of control artificially by insecticides or by gassing, and natural control by encouraging the multiplication of predaceous and parasitic enemies. In the case of deciduous fruits, the San Jose scale and oyster-shell bark louse and a score of other species of greater or less importance are constantly appearing in orchards previously noninfested, and the giving of special advice and directions as to the means of control is an important feature of the work of the bureau. The more important of these scale pests are under special investigation. This group contains a great many species closely related, some very dangerous and others much less so, and it is of the greatest importance to correctly determine the species in every case. This requires the maintenance of a large type collection which has become, in the course of years, the best collection in the world in this group of insects, and the bureau is looked to as the central source of information for determination for the experiment stations in the United States and for many foreign stations. Relating to or supplementing the work on scale insects are the special investigations of hydrocyanic-acid gas in California and the white fly investigations in Florida.	(6) Scale insect investigations. This project is explained in column 1 of this sheet. Amount allotted.....	(6) Scale insect investigations. This project is explained in column 1 of this sheet. Amount allotted.....
12,000.00	5,000.00	5,000.00
(7) Investigations into the life history of the cattle tick. Under the large emergency appropriation made to the Bureau of Animal Industry, work has been directed toward the eradication of the cattle tick throughout the South. Eradication measures, however, must be based upon a full knowledge of the life history of the cattle tick, and, while this life history is undoubtedly understood in a general way—in fact, well enough understood so that the measures now undertaken by the Bureau of Animal Industry are proving effective—there are still points as yet unascertained which may have, and undoubtedly will have, an important bearing in expediting the practical work; and it is investigations of this kind that have been undertaken by the Bureau of Entomology under this project. Studies of the period in which cattle may be kept in tick-infested	(7) Investigations into the life history of the cattle tick. This project is explained in column 1 of this sheet. Amount allotted.....	(7) Investigations into the life history of the cattle tick. This project is explained in column 1 of this sheet. Amount allotted.....
6,000.00	6,500.00	6,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Entomological investigations, 1908, \$113,800—Continued.</i>	<i>Entomological investigations, 1908, \$158,800—Continued.</i>	<i>Entomological investigations, 1910, \$199,800—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>areas in the spring without danger of infestation from the seed ticks from eggs hatching when sufficient effective temperature has accumulated have resulted in the establishing of a law which will enable ranchers to determine this period exactly. As a result of careful studies of the incubation period and the longevity of the seed tick, the exact time required to free pastures or other inclosures from ticks, in case the cattle are removed, has been ascertained. The time required at different seasons to free cattle of ticks by placing in an inclosure from which the ticks had been eliminated by starvation or otherwise has also been shown, and studies are being made on the questions of the necessity of double fences, the importance of water courses in the dissemination of ticks, the restriction of the cattle tick to the cattle, and the question as to whether deer and horses and some other animals must be taken into consideration in the practical work of tick eradication are still under investigation.....</p>		
(8) Experimental work with insecticides. Enormous advances have been made in the knowledge of the use of insecticides for various insect pests during the last score of years, and their employment has become almost universal among the fruit and truck growers and, in fact, in all the relations of insect pests to agriculture. The annual expenditure in the United States for insecticide materials and the cost of their application is enormous. The spraying of the apple alone probably costs upward of \$8,000,000 a year, on the basis of such treatment, for a little more than half of the producing trees. Most commercial orchards are sprayed now for the San Jose scale and other pests, and enormous expenditures are made annually in the case of truck crops. The experimental work of the bureau with insecticides is to determine the most efficient of these remedies and the most economical means of applying them, and to exploit the information gained by demonstrational work wherever such is needed. The experience of every year improves the methods and increases the efficiency.	(8) Experimental work with insecticides. This project is explained in column 1 of this sheet. Amount allotted.....	(8) Experimental work with insecticides. This project is explained in column 1 of this sheet. Amount allotted.....
\$5,000.00	\$3,000.00	\$3,000.00
<p>The experimental work conducted by the bureau with insecticides includes continued experimentation with old and new arsenical mixtures, the determination of the purity of brands of these and other insecticides in cooperation with the Bureau of Chemistry, the continuation of tests and demonstrational work with lime-sulphur washes for the San Jose scale and other scale pests, and of such proprietary insecticides as show evidences of real utility, and the testing of new insecticide mixtures which are coming up and being exploited in numbers every year.....</p>		
(9) Investigation of insects in their direct relation to the health of man. Investigations have been continued of the distribution, life history, and remedies against mosquitoes that carry disease, especially the different mosquitoes of the genus Anopheles that have been proved to carry malaria and the other species of the same genus that are inferentially supposed to have the same disease-bearing potentiality. Similar work has been done and is being done upon the distribution in this country of the yellow-fever mosquito. The house fly, the agency of which in the carriage of typhoid fever has been abundantly demonstrated, has been and will be studied on a large scale with reference to its destruction.	(9) Investigation of insects in their direct relation to the health of man. This project is explained in column 1 of this sheet. Amount allotted.....	(9) Investigation of insects in their direct relation to the health of man. This project is explained in column 1 of this sheet. Amount allotted.....
3,000.00	2,000.00	2,000.00
(10) Silk investigations. The methods that have been followed some years past in the effort to establish the production of silk in the United States have been continued. Eighty-five ounces of tested eggs were imported from Italy and distributed to all applicants in the spring. About 11,000 seedlings of the best white mulberry were also distributed. Cocoons were purchased from American raisers at a rate varying from 90 cents to \$1.15 per dry pound, and these cocoons were reeled at the department. The reeled silk on hand was sold during the year at \$4 per pound, bringing in a return of \$1,012, which was deposited in the Treasury Department in compliance with the law. From this effect there is growing in the country a large supply of thrifty mulberry trees of the right variety, and a number of people are being educated in the care of silkworms and in the production of cocoons, the department offering in this way a small market to encourage these people. The result is that in case a steady commercial demand for American cocoons should arise the supply will be such as to meet this demand. It is the necessary first step toward possible future establishment of the silk-raising industry in the United States.	(10) Silk investigations. (No appropriation was made for silk investigations for the fiscal year 1909.)	(10) Silk investigations. (No appropriation was made for silk investigations for the fiscal year 1910.)
1,250.00		
(11) Apicultural investigations. The main problem taken up in this work was an investigation of the brood diseases of bees. These diseases cause an annual direct loss to the bee keepers of the United States which is estimated at over \$2,000,000. This feature does not include the honey crop which is lost in the following year and successive years, nor does it take into consideration	(11) Apicultural investigations. This project is explained in column 1 of this sheet. Amount allotted.....	(11) Apicultural investigations. This project is explained in column 1 of this sheet. Amount allotted.....
5,300.00	10,000.00	10,000.00

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<p><i>Entomological investigations, 1908, \$113,800—Continued.</i></p> <p>PROJECTS—continued.</p> <p>that many bee keepers are driven permanently out of the business in regions where the disease is epidemic. These diseases retard the progress in the industry and often wipe it out in limited regions. Since this subject was taken up, about a year and a half ago, six publications have been presented on various phases of the work of controlling these maladies. Careful bacteriological work as to the cause of the disease was necessary before the bacteria could be controlled in a systematic manner, and for the first time in the history of the bee-disease work the cause of one of the diseases has been definitely learned. This phase of the work is now being continued for the other diseases. Plans are now made for a large series of tests of the various methods of treatment which suggest themselves from the results of the bacteriological work. Work on bee paralysis, an obscure disease of adult bees which causes large losses in the warmer parts of the country, is being undertaken as rapidly as possible.</p> <p>Since the United States does not produce nearly enough honey to supply its needs, a detailed study of a single State is now being made to determine the methods used by bee keepers, and especially to learn whether it would be possible to produce more honey at a profit. This work is now nearing completion. In this study it has been found that diseases are present more generally than has been supposed, and they often work disaster without the knowledge of the bee keepers themselves.</p> <p>A series of tests has been begun to show the comparative value of various races of bees in fertilizing red clover..</p> <p>(12) Investigations of insects affecting cotton other than the Mexican cotton boll weevil. The bureau has practically completed its investigation of the cotton bollworm and the remedies against it, but there are other insects injurious to cotton aside from the boll weevil and the bollworm, which almost annually damage the crop to a certain extent. These are cutworms, sharpshooters, and certain other species, notably the cotton plant louse, which injures the young cotton plants in the spring. A study of these insects is being made by a field agent of the bureau, working in cooperation with the Texas State Agricultural Experiment Station. He has up to the present time obtained very promising results, and it is considered important that the investigation be continued.....</p> <p>(13) White fly investigations. A complete study of the life history of the white fly in Florida as a basis for the remedial work outlined as follows:</p> <p>A thorough investigation of the best means of controlling the white fly by fumigation with hydrocyanic-acid gas, involving experimental work to determine the best time, methods, and strength of gas, and demonstrational work in orchards in different parts of the State to familiarize orange growers with the details of the process.</p> <p>Careful field tests of different insecticide washes which are available against the white fly and apparatus for their application.</p> <p>A thorough study of the three or four important fungous diseases of the white fly, with the object of determining, first, their efficiency, and, second, the best means of propagating them and encouraging their prompt development in white fly infested orchards.</p> <p>A study of all natural parasitic enemies of the white fly and related species, with the idea of introducing such parasites into Florida as show any likelihood of being efficient aids in the control of this pest.....</p> <p>(14) Miscellaneous investigations and other work. Under the head of miscellaneous investigations and other work there are a number of insects of economic importance whose damage is not so great as that of those placed in the first class, which are constantly under observation and of which more or less extensive investigations are being made. For example, the subject of insects injurious to shade trees and ornamental plants has been under investigation for some years, with the idea of eventually publishing an extensive practical report on this subject. The circulars of information giving the results of investigations of individual pests of this class are now being published, and others are under way. An investigation now going on into the insects affecting nut trees, and especially the pecan, also comes under this head. Every year some new pest comes under this miscellaneous project. Emergencies arising under other projects are also supplied from this item of reserve from time to time as additional allotment seems necessary. The amount allotted covers traveling expenses, laboratory supplies, and the employment of temporary assistants in investigations of insects in this class.....</p>	<p><i>Entomological investigations, 1909, \$158,800—Continued.</i></p> <p>PROJECTS—continued.</p> <p>(12) Investigations of insects affecting cotton other than the Mexican cotton boll weevil. This project is explained in column 1 of this sheet. Amount allotted.....</p> <p>(13) White fly investigations. This project is explained in column 1 of this sheet. Amount allotted.....</p> <p>(14) Miscellaneous investigations and other work. This project is explained in column 1 of this sheet. Amount allotted.....</p>	<p><i>Entomological investigations, 1910, \$199,800—Continued.</i></p> <p>PROJECTS—continued.</p> <p>(12) Investigations of insects affecting cotton other than the Mexican cotton boll weevil. This project is explained in column 1 of this sheet. Amount allotted.....</p> <p>(13) White fly investigations. This project is explained in column 1 of this sheet. Amount allotted.....</p> <p>(14) Miscellaneous investigations and other work. This project is explained in column 1 of this sheet. Amount allotted.....</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Entomological investigations, 1908, \$113,800—Continued.</i>	<i>Entomological investigations, 1909, \$158,800—Continued.</i>	<i>Entomological investigations, 1910, \$199,800—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
	(15) Southern field crop insect investigations. The special emergency appropriation for the cotton boll weevil, which covered a large part of the work under this section, was not made for the fiscal year 1909, but the investigations have been continued under the regular appropriation. The work during the summer of 1908 in the new regions that have recently been invaded by the cotton boll weevil indicate the absolute necessity for extensive laboratory and fieldwork on this insect under the changed conditions. The work of the Bureau in Louisiana and Mississippi has already excited much interest among the planters, and there is an urgent call for the establishment of a permanent laboratory in the delta region and field laboratories at other points. The problem of boll-weevil control becomes in many respects a different one in these regions, and the full knowledge of the life history and habits of the insect gained from equally careful work in the newly infested territory. There are insect enemies of other southern staple crops which need investigation, notably of sugar cane and rice. A certain amount of work has been done with these insects incidental to other investigations, and it is proposed thoroughly to study such pests of considerable importance, as the sugar-cane borer, the sugar-cane root worm, the water weevil of the rice crop, and others. Insects affecting tobacco in other parts of the South also come under this head, and with the widespread movement towards further diversification of crops in the South it is safe to predict that the changing of nature's balance will bring forward other insect injuries demanding investigation..... \$20,000.00	(15) Southern field crop insect investigations. This project is explained in column 2 of this sheet. Amount allotted..... \$25,000.00
	(16) Hydrocyanic-acid gas investigations. Hydrocyanic-acid gas has been the chief means of controlling the principal scale insects of citrus fruit trees in California for many years. A large percentage of the commercial orchards in the State are fumigated every year, at a cost ranging from 25 cents to \$1.50 a tree, or a total annual expenditure of from \$1,500,000 to \$2,000,000, on the basis of the fumigation of 50 per cent of the trees every year. It becomes, therefore, a matter of very great importance to conduct the operation of fumigation in the most effective and economical manner. The work being done by the Bureau on this subject in California is aimed to thoroughly standardize the process, and was undertaken in response to urgent demands from the horticultural commissioners of the principal fruit-producing counties of California and of many prominent growers..... 5,000.00	(16) Hydrocyanic-acid gas investigations. This project is explained in column 2 of this sheet. Amount allotted..... 5,000.00
	(17) Investigation of insects affecting drying or dried fruits. The restrictions of the Bureau of Chemistry, of this Department, on the amount of sulphur permissible in such products, has made necessary a	(17) Investigation of insects affecting drying or dried fruits. (This investigation was practically concluded at the close of the packing season of 1908. No allotment has been deemed necessary for its continuation.)

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Entomological investigations, 1908, \$113,800—Continued.</i>	<i>Entomological investigations, 1909, \$158,800—Continued.</i>	<i>Entomological investigations, 1910, \$199,800—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
	<p>thorough investigation of the subject to determine the exact influence of sulphuring on insect attack, while the fruit is drying and in storage, and to determine how infestation may be best avoided. A large number of samples of various classes of fruits have been collected both from drying trays, out-of-doors and from bins where the fruit is stored, so that any possible insects infesting same might be bred out. A considerable series of insects has been thus secured and a study is being made of the life history and habits of same, as indicating how best to avoid infestation.....</p> <p>(18) Investigation of insects affecting tobacco. The investigation of insects affecting tobacco was begun in July, 1907. The work has been confined to that part of the dark tobacco belt known as the Clarksville and Hopkinsville districts, which comprises 14 counties. In the spring of 1907 the tobacco flea-beetle, by its ravages upon young plants in the plant bed, reduced the average of tobacco fully 20 per cent, thereby entailing a loss of \$2,000,000. A cheap and efficient remedy has been found for this pest. The tobacco horn worm, upon the average, damages the tobacco crop not less than 10 per cent, an annual loss of \$1,000,000 or more. Paris green is used in dust form upon the plants as a remedy. But Paris green, while reasonably effective, is somewhat caustic in its effects upon the plant and injures a great deal of tobacco. Other poisons are being tested to find an insecticide as effective upon tobacco worms, but without the caustic effect upon the plant. Manufacturers of insecticides are cooperating with the bureau, and two new insecticides will be tested in 1909. It has been found that fall plowing will destroy 39 per cent of the tobacco moths that would emerge the following year. In the dark tobacco belt of Virginia a yearly loss to growers of tobacco of \$800,000 is caused by the "wireworm." The Virginia Experiment Station has requested the bureau to institute an investigation of this pest. In the shade tobacco districts of Florida and Georgia the tobacco bud worm is a very severe pest. Tobacco injured by this insect is reduced in value to about half the price of uninjured tobacco. An investigation of the two last-named insects should be instituted immediately.....</p> <p>(19) Insect-inspection work. The Department of Agriculture has become perhaps the largest importing agency in the United States for new plants and seeds. Much of this material comes from the quarters of the world which have never been explored entomologically and with which there has been very little exchange of plant material. All of this material</p>	<p>(18) Investigation of insects affecting tobacco. This project is explained in column 2 of this sheet. Amount allotted.....</p> <p>(19) Insect-inspection work. This project is explained in column 2 of this sheet. Amount allotted.....</p>
	\$2,500.00	\$5,000.00
	5,000.00	2,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1232); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Entomological investigations, 1908, \$113,800—Continued.</i>	<i>Entomological investigations, 1909, \$158,800—Continued.</i>	<i>Entomological investigations, 1910, \$199,800—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
	<p>is likely to harbor new insect pests, the introduction of which into the United States might work enormous losses to the existing fruit and other cultures. All such material is therefore most carefully inspected and thoroughly fumigated, and whenever any of it is infested with new enemies the destruction of which can not be assured, it is destroyed outright. During the past year nearly a thousand lots of imported plants were inspected for injurious insects, the largest one of these containing over five thousand plants. Many of these lots have been fumigated, and others have been destroyed, and all were given most careful examination. In the course of this work some pests, which threatened to be very important and dangerous, have been detected and destroyed.</p> <p>Inspection is also made, by request of local nurserymen, of all material shipped from the District of Columbia to adjoining States, as, owing to the laws of these States, no material can pass their borders without a certificate of inspection. There is no law requiring such inspection by the department authorities, and it is extended as a necessary courtesy, since without it the local dealer would be practically limited to sales within the District. Comparatively little time, however, is required for this feature of the work, but the general inspection work of the bureau and the necessary examinations and studies of imported material which go with it, occupy the larger portion of the time of two expert assistants.....</p>	
	<p>(20) Cactus insect investigations. The extensive investigations carried on under the Bureau of Plant Industry concerning the practical use of certain species of cactus as forage have shown that the insect problem as connected with this new use of these plants is a serious one, and the Bureau of Entomology is urgently requested by the Bureau of Plant Industry to take up this work. Some progress has already been made.....</p>	<p>(20) Cactus insect investigations. This project is explained in column 2 of this sheet. Amount allotted.....</p>
	\$2,000.00	\$2,500.00
	2,500.00	
		<p>(21) Argentine ant investigations. The damage already done by an ant accidentally introduced into Louisiana, California, and possibly certain other States has increased to such a point as to demand investigation by the bureau. The investigations made by the officials of the States in question have as yet resulted in the discovery of no practical remedy. This insect is an agricultural and horticultural pest as well as a pest to stored foods and to households. It is enormously prolific, and breeds under conditions that make it especially difficult to control.....</p>
		4,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282): to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued..

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Entomological investigations, 1908, \$112,800—Continued.</i>	<i>Entomological investigations, 1909, \$153,800—Continued.</i>	<i>Entomological investigations, 1910, \$199,800—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
		(22) Pear thrips investigations in California. This investigation, begun in 1907, should be considerably enlarged. The insect has greatly increased in destructiveness and has spread to the principal deciduous fruit sections in the San Francisco Bay region and during 1908 caused a loss of perhaps from one-half to three-fourths of a million dollars. Owing to the considerable diversity in conditions in the several fruit-growing valleys it is highly desirable to make local studies in each of these and to carry out experiments and demonstrations in remedial work..... \$15,000.00
		(23) Cranberry insect investigations in Wisconsin. The investigations of cranberry insects, begun in 1908, have shown the need of more extensive work, especially in Wisconsin, where conditions of culture require important changes in methods effective in eastern bogs. Insect losses to cranberries are very severe in the former section, and their control will require detailed information concerning their life and habits, and large-scale experiments with remedial measures, including work with sprays flowing with water and improvements in methods of growing and handling the crop..... 5,000.00
		(24) Damage to fruit trees by bark-beetles following attack by the San Jose scale. The general presence of the San Jose scale in orchards, and the consequent weakening of many trees, has resulted in the attack of these by principally two species of bark-beetles, which quickly bring about their death. This injury was very extensive in northern Ohio during 1908, and an investigation begun shows that there is great danger to our fruit interests from these pests under the conditions now obtaining in many orchards.... 2,500.00
		(25) Rice-insect investigations. The subject of insects that damage rice has not been handled by the entomological service of the Department of Agriculture since 1881. In the meantime rice culture has grown to considerable proportions in new localities, such as Texas and Louisiana, and has encountered new insect pests and variations in the habits of those already known. The amount of damage and the importance of the growing industry in new localities demand careful investigation of the insect problem in connection with this crop..... 5,000.00
		(26) Sugar cane insect investigations. The statement just made regarding rice-insect investigations holds in every detail for sugar-cane insects. No investigation of this group of crop pests has been made by the Department of Agriculture since 1880, and the culture of this crop has extended in much the same way as has rice culture. This investigation seems to be urgent..... 5,000.00
		(27) Investigation of the sources of infestation of stored grain. Investigations of the insects injurious to stored grain and

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Entomological investigations, 1908, \$113,800—Continued.</i>	<i>Entomological investigations, 1909, \$153,800—Continued.</i>	<i>Entomological investigations, 1910, \$199,800—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
		especially the flour beetles, the Mediterranean flour moth, and other insects which injure flour for export, begun in 1893, are being continued with a much wider scope. Recently there has been a great demand for information as to the points of infestation of export flour through New Orleans, La., and Galveston, Tex. To determine this a series of very careful investigations must be undertaken, as the possibility exists of infestation at any one or more of the different places where the flour is made until it reaches the consumer. This is a vital question, as it affects our export trade, since many complaints are registered each year of serious damage to flour on its receipt in Europe and Africa. Other questions to be solved are to determine the best methods of fumigating all of the likely points of infestation, the mills, cars, vessels, ships, and warehouses. The gases in principal use are bisulfid of carbon, hydrocyanic-acid gas, and sulphur dioxide. \$5,000.00
<i>Preventing spread of moths, 1907-8, \$150,000.</i>	<i>Prevention of spread of moths, 1908-9, \$250,000.</i>	<i>Prevention of spread of moths, 1910, \$300,000.</i>
Salaries in Washington..... \$5,766.64	Salaries in Washington..... \$6,000.00	Salaries in Washington..... \$6,000.00
Salaries out of Washington (including unskilled labor)..... ^a 110,672.29	Salaries out of Washington (including unskilled labor)..... ^a 200,000.00	Salaries out of Washington (including unskilled labor)..... ^a 250,000.00
Stationery..... 39.57	Stationery..... 100.00	Stationery..... 100.00
Miscellaneous supplies and services, equipment, books, machinery, etc..... 7,788.56	Miscellaneous supplies and services, equipment, books, machinery, etc. ^b 16,000.00	Miscellaneous supplies and services, equipment, books, machinery, etc. ^b 16,000.00
Furniture..... 94.75	Furniture..... 500.00	Furniture..... 500.00
Express..... 16.54	Express..... 200.00	Express..... 200.00
Telegraph..... 9.33	Telegraph..... 50.00	Telegraph..... 50.00
Telephone..... 162.91	Telephone..... 150.00	Telephone..... 150.00
Rent..... 859.94	Rent..... 1,000.00	Rent..... 1,000.00
Apparatus, instruments, and laboratory material..... 3,942.05	Apparatus, instruments, and laboratory materials..... ^c 16,000.00	Apparatus, instruments, and laboratory materials..... ^c 16,000.00
Travel and station and field expenses..... 3,094.13	Travel and station and field expenses..... 10,000.00	Travel and station and field expenses..... 10,000.00
Total expenditures to September 30, 1908..... 132,446.71		
Outstanding liabilities on September 30, 1908 (estimated)..... 8,596.08		
Balance to be turned back in Treasury (estimated)..... 364.48		
Total expenditures to June 30, 1907..... 8,592.73		
Total amount of above appropriation..... 150,000.00	Total amount of above appropriation (an increase over 1908 of \$100,000)..... 250,000.00	Total amount estimated (an increase over 1909 of \$50,000)..... 300,000.00
^a \$103,092.29 of this amount was paid for unskilled labor.	^a \$185,000 of this amount is being used in the employment of unskilled labor.	^a \$235,000 of this amount is to be used in the employment of unskilled labor.
	^b This item includes large quantities of miscellaneous hardware, axes, bush hooks, and laborers' tools.	^b This item will include large quantities of miscellaneous hardware, axes, bush hooks, and laborers' tools.
	^c This item includes spraying machines and large quantities of insecticides for field use.	^c This item will include spraying machines and large quantities of insecticides for field use.
NOTE.—The above expenditures, classified in accordance with the suggestion of the Congressional Committee on Expenditures for this department, were necessary in prosecuting the important work of preventing spread of moths. This work was divided into the following projects:	NOTE.—The above expenditures, classified in accordance with the suggestion of the Congressional Committee on Expenditures for this department, are being incurred in prosecuting the important work of preventing spread of moths. This work is divided into the following projects:	NOTE.—The above estimates of expenditures, classified in accordance with the suggestions of the Congressional Committee on Expenditures for this department, have been submitted as necessary for prosecuting the important work of preventing spread of moths. This work will be divided into the following projects:
PROJECTS.	PROJECTS.	PROJECTS.
(1) Introduction of parasites from abroad and their care in this country. (The bulk of the expense attached to this parasite work is borne by the State of Massachusetts)..... 5,000.00	(1) This project is explained in column 1 of this sheet. Amount allotted..... 5,000.00	(1) This project is explained in column 1 of this sheet. Amount allotted..... 5,000.00
(2) Active measures for the destruction of the gipsy moth in newly infested territory and in limiting its spread. These measures for the most part are mechanical, necessitating the employment of a large force of unskilled laborers throughout the entire year..... 136,407.27	(2) This project is explained in column 1 of this sheet. Amount allotted..... 245,000.00	(2) This project is explained in column 1 of this sheet. Amount allotted..... 295,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Cotton boll weevil investigations, 1908, \$40,000.</i>	<i>Cotton boll weevil investigations.</i>	<i>Cotton boll weevil investigations.</i>
Salaries:	The special emergency appropriation for the cotton-boll weevil was not made for the fiscal year 1909. The investigations have been continued under the regular appropriations to the bureau. See project No. 15, Entomological Investigations, 1909.	No recommendation for special emergency appropriation for the cotton-boll weevil will be submitted for the fiscal year 1910. The investigations will be continued under the regular appropriations. See project No. 15, Entomological Investigations, 1910.
In Washington.....		
Out of Washington.....		
Travel and station and field expenses.....		
Apparatus, instruments, and laboratory material.....		
Miscellaneous supplies and services, equipment, books, machinery, etc.....		
Stationery.....		
Furniture.....		
Freight.....		
Express.....		
Telegraph and telephone.....		
Rent.....		
Fuel.....		
Total expenditures to September 30, 1908.....		
Outstanding liabilities on September 30, 1908 (estimated)...		
Balance to be turned back in Treasury (estimated).....		
Total amount of above appropriation.....		
NOTE.—The above expenditures, classified in accordance with the suggestion of the Congressional Committee on Expenditures for this department, were necessary in prosecuting the important work of cotton boll weevil investigations. This work was divided into the following projects:		
PROJECTS.		
(1) Continuation of the investigations relating to hibernation.....	1,000.00	
(2) Increasing the effectiveness of parasites.....	5,000.00	
(3) Study of culture practice.....	1,000.00	
(4) Study of climatic control.....	1,000.00	
(5) Further investigation of the possibilities of trapping....	1,000.00	
(6) Tests of check-row system of cultivation.....	1,500.00	
(7) Experiments upon fall destruction.....	1,500.00	
(8) Topping of plants to determine its effect upon weevil...	500.00	
(9) Study of machinery for the control of the boll weevil...	1,000.00	
(10) Determination of most advisable methods of avoiding or preventing injury.....	1,000.00	
(11) Study of factors causing local variations.....	1,000.00	
(12) Relation of fire-ant (<i>Solenopsis geminata</i>) to weevil control.....	1,000.00	
(13) Study of life history of the weevil in the Red River Valley.....	750.00	
(14) A further study of the flight of the boll weevil.....	1,000.00	
(15) Insecticide investigations.....	2,000.00	
(16) A statistical study of boll weevil damage.....	1,000.00	
(17) Biological relationships between the boll weevil and the cotton plant.....	2,000.00	
(18) Practical utilization of the cotton caterpillar.....	1,500.00	
(19) A study of the control of various insects.....	1,000.00	
(20) Investigation of the possibility of utilizing cotton stalks.	1,500.00	
(21) Legislative requirements to prevent artificial dissemination.....	750.00	
(22) Investigation of the relationship of Spanish moss.....	1,000.00	
(23) Photographic work illustrating the results of the investigation.....	1,000.00	
(24) Reserve to be used in eradication of isolated colonies likely to occur at any time, payment of labor, traveling expenses, cost of inspection, contracts, etc., depending altogether upon the size and location of the colony or colonies that may be found.....	10,000.00	
Total of all appropriations for Bureau of Entomology.....		
Total expenditures to September 30, 1908.....		
Outstanding liabilities on September 30, 1908 (estimated) ..		
Balance to be turned back in Treasury (estimated).....		
	Total of all appropriations for Bureau of Entomology (an increase over 1908 of \$108,950).....	Total amount estimated for Bureau of Entomology (an increase over 1909 of \$92,700).....

BUREAU OF BIOLOGICAL SURVEY.

<i>Salaries, Bureau of Biological Survey, 1908, \$7,580.</i>	<i>Salaries, Bureau of Biological Survey, 1909, \$7,580.</i>	<i>Salaries, Bureau of Biological Survey, 1910, \$18,000.</i>
Merriam, C. Hart..... Chief of Bureau, at \$3,000.....	1 biologist, who shall be chief of bureau.....	1 biologist, who shall be chief of bureau.....
Thompson, E. J..... Clerk, class one.....	1 clerk, class one.....	1 clerk, class four (submitted).....
Kent, N. H..... Clerk, at \$1,000.....	2 clerks, at \$1,000 each.....	1 clerk, class two (submitted).....
Milligan, C. B..... Clerk, at \$900.....	1 clerk.....	1 clerk, class one.....
Earnshaw, Frank L..... Clerk, at \$900.....	1 messenger or laborer.....	2 clerks, at \$1,000 each.....
Fisher, Della..... Laborer, at \$480.....		2 clerks, at \$900 each (increase of 1 by transfer from lump fund).....
Total.....	Total of above appropriation (no increase over 1908).....	1 messenger (by transfer from lump fund).....
Unexpended balance.....		1 messenger or laborer.....
Total of above appropriation.....		1 laborer (by transfer from lump fund).....
		Total amount estimated (an apparent increase over 1909 of \$5,420).....

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Biological Survey—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Bureau of Biological Survey, 1908, \$7,580—Continued.</i>	<i>Salaries, Bureau of Biological Survey, 1909, \$7,580—Continued.</i>	<i>Salaries, Bureau of Biological Survey, 1910, \$13,000—Continued.</i>
The above force performed the following duties:	The above force are performing the following duties:	NOTE.—The apparent increase is \$5,420, but not considering the places transferred from the lump fund, there is an actual increase of \$3,200. The above force will perform the following duties:
Administrative: 1 chief of bureau..... \$3,000.00 1 messenger or laborer..... 480.00 \$3,480.00	Administrative: 1 chief of bureau..... \$3,000.00 1 messenger or laborer..... 480.00 \$3,480.00	Administrative: 1 chief of bureau..... \$3,000.00 1 clerk, class four (submitted)..... 1,800.00 1 messenger..... 720.00 1 messenger or laborer..... 480.00 1 laborer..... 600.00 \$6,600.00
Correspondence: 1 clerk, class one..... 1,200.00 1 clerk..... 1,000.00 1 clerk..... 900.00 3,100.00	Correspondence: 2 clerks, at \$1,000 each..... 2,000.00 1 clerk..... 900.00 2,900.00	Correspondence: 1 clerk, class one..... 1,200.00 2 clerks, at \$1,000 each..... 2,000.00 2 clerks, at \$900 each..... 1,800.00 5,000.00
Office files: 1 clerk..... 1,000.00 7,580.00	Office files: 1 clerk, class one..... 1,200.00 7,580.00	Office files: 1 clerk, class one..... 1,400.00 13,000.00
<i>Biological investigations, 1908, \$44,420.</i>	<i>Biological investigations, 1909, \$54,420.</i>	<i>Biological investigations, 1910, \$90,170.</i>
Salaries: In Washington..... \$28,180.24 Out of Washington..... 6,872.56 Stationery..... 511.78 Miscellaneous supplies and services, equipment, etc..... 2,452.11 Furniture..... 408.17 Freight..... 3.50 Express..... 248.59 Telegraph..... 62.71 Telephone..... 16.31 Apparatus, instruments, and laboratory material..... 330.60 Travel and station and field expenses..... 5,026.47 Total expenditures to September 30, 1908..... 44,113.04 Outstanding liabilities on September 30, 1908 (estimated)..... 77.61 Balance to be turned back in Treasury (estimated)..... 229.35 Total amount of above appropriation..... 44,420.00	Salaries: In Washington..... \$32,154.00 Out of Washington..... 7,833.00 Stationery..... 300.00 Miscellaneous supplies and services, equipment, etc..... 2,625.00 Furniture..... 500.00 Freight..... 100.00 Express..... 300.00 Telegraph..... 75.00 Telephone..... 20.00 Apparatus, instruments, and laboratory material..... 700.00 Travel and station and field expenses..... 9,813.00 Total amount of above appropriation (an increase over 1908 of \$10,000)..... 54,420.00	Salaries: In Washington..... \$35,320.00 Out of Washington..... 25,000.00 Stationery..... 500.00 Miscellaneous supplies and services, equipment, etc..... 3,200.00 Furniture..... 1,100.00 Freight..... 50.00 Express..... 400.00 Telegraph..... 120.00 Telephone..... 30.00 Apparatus, instruments, and laboratory material..... 1,000.00 Travel and station and field expenses..... 23,450.00 Total amount estimated (an apparent increase over 1909 of \$35,720)..... 90,170.00
NOTE.—The above expenditures, classified in accordance with the suggestion of the Congressional Committee on Expenditures for this department, were necessary in prosecuting the important work of the Bureau of Biological Survey. This work fell naturally under the following projects:	NOTE.—The above expenditures, classified in accordance with the suggestion of the Congressional Committee on Expenditures for this department, are being incurred in prosecuting the important work of the Bureau of Biological Survey. This work falls naturally under the following projects:	NOTE.—The apparent increase is \$35,750, but adding the saving in salaries of places transferred to the statutory roll, amounting to \$2,220 the actual increase is \$37,970. NOTE.—The above estimates of expenditures, classified in accordance with the suggestion of the Congressional Committee on Expenditures for this department, have been submitted as necessary for prosecuting the important work of the Bureau of Biological Survey. This work will fall naturally under the following projects:
PROJECTS.	PROJECTS.	PROJECTS.
(1) Preparation of reports and maps relating to life and crop zones (Dr. C. Hart Merriam, chief, in charge): Salaries..... 6,851.30 This project includes the preparation of maps and reports relating to life and crop zones of the several States and Territories, and the country as a whole; also maps showing the distribution of our native birds and mammals. These maps serve as guides in selecting crops; in locating areas inhabited by the various beneficial and noxious animals; and in framing legislation for the protection of beneficial species, including game birds and mammals.	(1) Preparation of reports and maps relating to life and crop zones (Dr. C. Hart Merriam, chief, in charge): Salaries..... 8,000.00	(1) Preparation of reports and maps relating to life and crop zones (Dr. C. Hart Merriam, chief, in charge): Salaries..... 8,000.00
(2) Biological survey of California (Dr. C. Hart Merriam, chief, in charge): Salaries..... \$1,643.33 Travel and field expenses..... 2,223.06 3,866.39	(2) Biological survey of California (Dr. C. Hart Merriam, chief, in charge): Salaries..... \$700.00 Travel and field expenses..... 1,800.00 2,500.00	(2) Biological survey of California (Dr. C. Hart Merriam, chief, in charge): Salaries..... \$1,200.00 Travel and field expenses..... 2,300.00 3,500.00
Objects same as in Project 1.		
(3) Biological survey of New Mexico (Vernon Bailey, assistant in charge of Geographic Distribution, in charge): No expenditure. For the purpose of gathering material for maps and reports on the life and crop zones of this territory, similar in scope to Projects 1 and 2.	(3) Biological survey of New Mexico (Vernon Bailey, assistant in charge of Geographic Distribution, in charge): Salaries..... \$2,400.00 Traveling and other expenses..... 2,400.00 4,800.00	(3) Biological survey of New Mexico (Vernon Bailey, assistant in charge of Geographic Distribution, in charge): Salaries..... 320.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Biological Survey—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Biological investigations, 1908, \$44,420—Continued</i>	<i>Biological investigations, 1909, \$54,420—Cont'd.</i>	<i>Biological investigations, 1910, \$90,170—Cont'd.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(4) Biological survey of Colorado (Merritt Cary, assistant, in charge): Salaries..... \$1,100.00 Traveling and other expenses..... 506.28 \$1,606.28	(4) Biological survey of Colorado (Merritt Cary, assistant, in charge): No expenditure.	(4) Biological survey of Colorado (Merritt Cary, assistant, in charge): Salary..... \$400.00
Objects as in Projects Nos. 1, 2, and 3.		
(8) Biological survey of Alaska: No expenditure. Includes study of the distribution of birds, mammals, and plants for the preparation of reports and maps showing the life zones of the Territory. Also study of abundance, distribution, and habits of game birds and mammals in connection with the establishment of game refuges and collection of information relative to the raising of fur-bearing mammals for profit, and data on which laws for the protection of game in that region may be based.	(8) Biological survey of Alaska: Salaries..... \$600.00 Traveling and other expenses... 900.00 \$1,500.00	(8) Biological survey of Alaska: Salaries..... \$900.00 Traveling and other expenses. 1,500.00 2,400.00
(9) Investigations of the food habits of birds (Dr. A. K. Fisher, assistant in charge of Economic Investigations, in charge): Salaries..... \$2,700.00 Purchase of bird stomachs..... 141.65 2,841.65 The work chiefly includes laboratory investigations of bird stomachs and preparation of records and office files concerning the food of native birds in order to publish such information for the benefit of farmers and fruit growers. In this manner the beneficial and injurious species may be distinguished and means taken to protect the useful birds and minimize the injury from the harmful kinds.	(9) Investigations of the food habits of birds (Dr. A. K. Fisher, assistant in charge of Economic Investigations, in charge): Salaries..... \$2,450.00 Purchase of bird stomachs..... 200.00 2,650.00	(9) Investigations of the food habits of birds (Dr. A. K. Fisher, assistant in charge of Economic Investigations, in charge): Salaries..... \$2,600.00 Purchase of bird stomachs..... 400.00 3,000.00
(10) Investigations into the relations of birds to the cotton boll weevil (A. H. Howell, assistant biologist, in charge): Salary..... \$375.00 Traveling and other expenses..... 226.50 601.50 The purpose of this project is to learn what kinds of birds feed upon the boll weevil, with a view to the protection of such birds by law. Also to devise means for the extension of the range and increase in the numbers of these useful kinds in parts of the cotton belt where they are scarce or wanting. Reports of progress are published and distributed in the cotton-growing areas.	(10) Investigations into the relations of birds to the cotton boll weevil (A. H. Howell, assistant biologist, in charge): Salary..... \$400.00 Traveling and other expenses... 300.00 700.00	(10) Investigations into the relations of birds to the cotton boll weevil (A. H. Howell, assistant biologist, in charge): Salary..... \$1,000.00 Traveling and other expenses. 1,000.00 2,000.00
(11) Investigations into the food habits of California birds (F. E. L. Beal, assistant in charge of Economic Ornithology, in charge): Salary..... 1,200.00 This field investigation is for the purpose of learning what California birds feed on fruit, the amount of damage they do, and to what extent the damage is offset by the destruction of injurious insects. Also to devise methods of protecting orchards from injury by birds. Final reports are being prepared for publication.	(11) Investigations into the food habits of California birds (F. E. L. Beal, assistant in charge of Economic Ornithology, in charge): Salary..... 600.00 This project is expected to be completed during the fiscal year 1909.	
(13) Investigation of the food of land game birds of the United States (W. L. McAtee, assistant biologist, in charge): No expenditure. Investigations are conducted to determine the relations of game birds to agriculture, their usefulness in destroying noxious insects and weed seeds, aside from their value as food.	(13) Investigation of the food of land game birds of the United States (W. L. McAtee, assistant biologist, in charge): No expenditure.	(13) Investigation of the food of land game birds of the United States (W. L. McAtee, assistant biologist, in charge): Salaries..... \$200.00 Traveling and other expenses..... 200.00 400.00
(14) Investigations of the food of aquatic game birds (W. L. McAtee, assistant biologist, in charge): No expenditure. The object of this work is to secure accurate knowledge concerning the food and food habits of wild ducks, geese, and other waterfowl as an aid to the preservation of these valuable birds and the stocking of ponds and waterways from which they are now absent. Also to furnish information as a basis for protective legislation.	(14) Investigations of the food of aquatic game birds (W. L. McAtee, assistant biologist, in charge): Salary..... \$150.00 Expenses..... 125.00 275.00	(14) Investigations of the food of aquatic game birds (W. L. McAtee, assistant biologist, in charge): Salaries..... \$500.00 Traveling and other expenses..... 500.00 1,000.00
(16) Investigation into the migration of birds (Prof. W. W. Cooke, migration expert, in charge): Salary..... 750.00 This work consists mainly in the compilation of data on the times and routes of migration of American birds, such knowledge furnishing a basis for protective legislation and for open and close seasons. The observations on which this work is based is largely furnished by voluntary and unpaid observers in many parts of the United States.	(16) Investigation into the migration of birds (Prof. W. W. Cooke, migration expert, in charge): Salary..... 1,400.00	(16) Investigation into the migration of birds (Prof. W. W. Cooke, migration expert, in charge): Salaries..... 1,600.00
(17) Investigation into the relations of mammals to agriculture (Dr. A. K. Fisher, assistant in charge of economic investigations, in charge): Salaries..... \$2,000.00 Traveling and other expenses..... 175.50 2,175.50 This covers the administration and routine work, together with general investigations of the relations to agriculture of wild mammals, especially rodents and carnivores.	(17) Investigation into the relations of mammals to agriculture (Dr. A. K. Fisher, assistant in charge of economic investigations, in charge): Salaries..... \$2,500.00 Traveling and other expenses. 600.00 3,100.00	(17) Investigation into the relations of mammals to agriculture (Dr. A. K. Fisher, assistant in charge of economic investigations, in charge): Salaries..... \$2,500.00 Traveling and other expenses. 1,000.00 3,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Biological Survey—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Biological investigations, 1908, \$44,420—Continued.</i>	<i>Biological investigations, 1909, \$54,420—Cont'd.</i>	<i>Biological investigations, 1910, \$90,170—Cont'd.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(19) Supervision over the importation of foreign mammals, birds, and birds' eggs (Henry Oldys, assistant biologist, in charge):	(19) Supervision over the importation of foreign mammals, birds, and birds' eggs (Henry Oldys, assistant biologist, in charge):	(19) Supervision over the importation of foreign mammals, birds, and birds' eggs (Henry Oldys, assistant biologist, in charge):
Salaries..... \$360.00	Salaries..... \$400.00	Salaries..... \$500.00
Inspection fees..... 510.00	Inspection fees..... 800.00	Inspection fees..... 1,000.00
\$870.00	\$1,200.00	\$1,500.00
The object of this work is to prevent (under act of Congress) the introduction into the United States of injurious birds and mammals.		
(20) Publication of information concerning game and birds (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge):	(20) Publication of information concerning game and birds (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge):	(20) Publication of information concerning game and birds (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge):
Salaries..... 2,100.00	Salaries..... 2,200.00	Salaries..... 2,400.00
The compilation, publication and distribution of information concerning game laws, interstate commerce in game, and concerning the value, preservation, and propagation of game and nongame birds.		
(21) Protection of game and birds (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge):	(21) Protection of game and birds (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge):	(21) Protection of game and birds (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge):
Salaries..... \$2,119.00	Salaries..... \$2,300.00	Salaries..... \$2,400.00
Traveling expenses..... 400.00	Traveling expenses..... 388.00	Traveling expenses..... 900.00
2,519.00	2,688.00	3,300.00
To secure enforcement of the Lacey Act and regulations concerning the interstate shipment of game, including cooperation with state game wardens and United States marshals. Evidence of violations of the federal game laws are transmitted to the Department of Justice and to state officials, and expert testimony given when necessary.		
(22) Supervision of bird and game reservations and game refuges (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge):	(22) Supervision of bird and game reservations and game refuges (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge):	(22) Supervision of bird and game reservations and game refuges (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge):
Salaries..... 54.00	Salaries..... 108.00	Salaries..... \$2,000.00
The Biological Survey is charged with the oversight of areas set apart by presidential proclamation or act of Congress as breeding refuges for birds and game mammals in danger of extinction.		Traveling expenses..... 1,000.00
(23) Protection of game in Alaska (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge):		3,000.00
Salary..... 300.00		
The supervision of the execution of the game laws of Alaska as provided by act of Congress; and preparation of reports on Alaska game. Project completed during this fiscal year.		
(24) Destruction of ground squirrels in Washington, Oregon, and Idaho, including study of bacterial diseases (S. E. Piper, scientific assistant in charge):	(24) Destruction of ground squirrels in Washington, Oregon, and Idaho, including study of bacterial diseases (S. E. Piper, scientific assistant, in charge):	(24) Destruction of ground squirrels in Washington, Oregon, and Idaho, including study of bacterial diseases (S. E. Piper, scientific assistant, in charge):
Salaries..... \$600.00	Salary..... 400.00	Salary..... \$900.00
Traveling and other expenses..... 349.34		Traveling and other expenses..... 600.00
949.34		1,500.00
To discover by field investigation the best and cheapest method by which the farmers of the Northwestern States can protect grain and other crops from ground squirrels. Both field and laboratory work are necessary.		
(25) Inquiry into the relation of wolves to stock raising (Vernon Bailey, assistant in charge of Geographic Distribution, in charge):	(25) Inquiry into the relation of wolves to stock raising (Vernon Bailey, assistant in charge of Geographic Distribution, in charge):	(25) Inquiry into the relation of wolves to stock raising (Vernon Bailey, assistant in charge of Geographic Distribution, in charge):
Salaries..... 300.00	Salaries..... 300.00	Salaries..... \$500.00
Field investigations into the extent of the damage to range stock from wolves, including study of the breeding and other habits, with a view to discovering the best methods of protection. Includes experiments with wire fencing.		Traveling expenses..... 500.00
(26) Study of fox farming (W. H. Osgood, assistant biologist, in charge):	(26) Study of fox farming (W. H. Osgood, assistant biologist, in charge):	1,000.00
Salary..... \$525.00	No expenditure.	
Traveling and other expenses..... 223.59		
748.59		
Preliminary investigations in this new and promising industry have resulted in the publication of a report which has aroused much interest. Further field work along much the same lines will be done with a view to the collection of data which will place the industry on a practical working basis.		
(27) Inquiry into the relation of wild geese to the grain crop of California (Dr. A. K. Fisher, assistant in charge of Economic Investigations, in charge):	(27) Inquiry into the relation of wild geese to the grain crop of California (Dr. A. K. Fisher, assistant in charge of Economic Investigations, in charge):	(27) Inquiry into the relation of wild geese to the grain crop of California (Dr. A. K. Fisher, assistant in charge of Economic Investigations, in charge):
No expenditure.	No expenditure.	No expenditure.
To collect information on the damage done to the grain crop of California by the wild geese wintering there, with an effort to devise methods for lessening the loss to farmers.		
(28) Expenses for administration, including contingent and miscellaneous expenses, laborers, and other general expenditures in Washington (Dr. C. Hart Merriam, chief in charge):	(28) Expenses for administration, including contingent and miscellaneous expenses, laborers, and other general expenditures in Washington (Dr. C. Hart Merriam, chief in charge):	(28) Expenses for administration, including contingent and miscellaneous expenses, laborers, and other general expenditures in Washington (Dr. C. Hart Merriam, chief in charge):
14,377.90	14,724.00	21,000.00
(29) Field work in eastern United States in relation to birds and small fruits (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge):	(29) Field work in eastern United States in relation to birds and small fruits (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge):	(29) Field work in eastern United States in relation to birds and small fruits (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge):
No expenditure.	Salary..... \$100.00	Salary..... \$500.00
A field study of the food habits of birds which eat cultivated fruits in the eastern United States, with the object of discovering methods of reducing the losses to the fruit growers from this source.	Traveling expenses..... 100.00	Traveling expenses..... 500.00
	200.00	1,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Biological Survey—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Biological investigations, 1908, \$44,420—Continued.</i>	<i>Biological investigations, 1909, \$54,420—Cont'd.</i>	<i>Biological investigations, 1910, \$90,170—Cont'd.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(30) Investigation of the plague of field mice in Nevada (S. E. Piper, scientific assistant, in charge): Salary..... \$700.00 Traveling and other expenses..... 179.20 \$879.20	(30) Investigation of the plague of field mice in Nevada (S. E. Piper, scientific assistant, in charge): Salary..... \$500.00 Completed with this fiscal year.	
During the year swarms of field mice destroyed extensive alfalfa fields in Nevada. The owners applied to the Biological Survey for assistance and an assistant was at once sent to Lovelocks, Nev., the center of the trouble. After a series of experiments a successful method of exterminating these pests by poison was discovered and put into effect.		
(31) Relation of woodpeckers to forestry and agriculture (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge): Salary..... 1,200.00	(31) Relation of woodpeckers to forestry and agriculture (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge): Salary..... 1,200.00	(31) Relation of woodpeckers to forestry and agriculture (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge): Salary..... \$600.00
This work consists of field and laboratory investigations of the food and habits of woodpeckers, with special reference to their relations to the important subject of forest preservation.		
	(32) Extermination of the English sparrow in southern California (Dr. T. S. Palmer, in charge of Game Preservation, in charge): Traveling expenses..... 500.00 Cooperation with the local authorities of the counties in southern California to prevent the further spread of the English sparrow in that region and to exterminate the colonies of these pests which have already gained a foothold. A small expenditure now will be effective in destroying these newly arrived pests, and thus save future heavy losses to the fruit growers.	(32) Extermination of the English sparrow in southern California (Dr. T. S. Palmer, in charge of Game Preservation, in charge): Traveling expenses..... 500.00
	(33) Supervision of national bison herd in Montana (Dr. C. Hart Merriam, chief, in charge): Traveling expenses..... 500.00 The purchase and fencing of a buffalo range in Montana was authorized by Congress in 1908, and the supervision of this range and the buffalo herd has been placed in charge of the Biological Survey.	(33) Supervision of national bison herd in Montana (Dr. C. Hart Merriam, chief, in charge): Salaries..... \$1,800.00 Traveling expenses..... 1,200.00 3,000.00
	(34) Gophers in relation to agriculture (Dr. A. K. Fisher, in charge of Economic Investigations, in charge): No expenditure. Field work is planned to learn the distribution of these extremely destructive mammals and the amount of damage done to agriculture by them. Experiments are conducted to determine the cheapest and most effective method of destroying them.	(34) Gophers in relation to agriculture (Dr. A. K. Fisher, in charge of Economic Investigations, in charge): Salaries..... \$400.00 Traveling expenses..... 400.00 800.00
	(35) Introduction and rearing of imported pheasants (Henry Oldys, assistant biologist, in charge): Salary..... \$75.00 Traveling expenses..... 100.00 175.00 The object of this project is to gather information for a bulletin on the introduction, present distribution in the United States, and best methods of rearing imported pheasants for game preserves and aviaries.	(35) Introduction and rearing of imported pheasants (Henry Oldys, assistant biologist, in charge): Salary..... \$300.00 Traveling expenses..... 250.00 550.00
	(36) Biological survey of Utah (W. H. Osgood, assistant biologist, in charge): Salaries..... \$900.00 Traveling and other expenses..... 700.00 1,600.00 A survey of the natural life areas of the State for the purpose of preparing reports and maps showing the life and crop zones as a guide to the farmers in selecting crops. Objects same as in Projects 1 and 2.	(36) Biological survey of Utah (W. H. Osgood, assistant biologist, in charge): Salaries..... \$1,000.00 Traveling and other expenses..... 1,000.00 2,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Biological Survey—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Biological investigations, 1908, \$44,420—Continued.</i> PROJECTS—continued.	<i>Biological investigations, 1909, \$54,420—Cont'd.</i> PROJECTS—continued.	<i>Biological investigations, 1910, \$90,170—Cont'd.</i> PROJECTS—continued.
	(37) Biological reconnaissance of parts of Virginia, Tennessee, Georgia, Alabama, Mississippi, North Carolina, Kentucky, and Louisiana (A. H. Howell, assistant biologist, in charge): Salaries..... \$700.00 Traveling and other expenses..... 500.00 \$1,200.00 Object same as in Projects 1 and 2.	(37) Biological reconnaissance of parts of Virginia, Tennessee, Georgia, Alabama, Mississippi, North Carolina, Kentucky, and Louisiana (A. H. Howell, assistant biologist, in charge): No expenditure.
	(38) Destruction of ground squirrels in California (Dr. A. K. Fisher, in charge of economic investigations, in charge): Salary..... \$500.00 Expenses..... 500.00 1,000.00 Experimental and demonstration work in destroying California ground squirrels, always serious enemies of agriculture and recently discovered to be carriers of plague.	(38) Destruction of ground squirrels in California (Dr. A. K. Fisher, in charge of economic investigations, in charge): Salary..... \$500.00 Expenses..... 500.00 \$1,000.00
	(39) Field mice investigations (S. E. Piper, assistant, in charge): Expenses..... 400.00 Investigations, experiments, and demonstration work for the purpose of reducing to a minimum the recurrence of mouse plagues with accompanying serious losses.	(39) Field mice investigations (S. E. Piper, assistant, in charge): Expenses..... 400.00
		(40) Relation of rabbits to agriculture: Salary..... \$400.00 Traveling expenses. 400.00 800.00 In large areas of the United States rabbits are extremely destructive to crops, nurseries, and fruit trees. The habits and distribution of the various species are being studied in order to devise effective methods for their destruction. Effort is being made to secure cultures of the diseases which periodically attack rabbits and practically exterminate them over wide areas.
		(41) Investigation of the English starling (Dr. T. S. Palmer, in charge of game preservation, in charge): Salary..... \$200.00 Traveling expenses. 100.00 300.00 The introduction several years ago of the English starling into the eastern United States and its subsequent increase and spread threatens the country with another bird pest unless prompt measures for its restriction are undertaken. It is proposed to investigate the matter thoroughly in order to learn the present distribution, abundance, and habits of the species in this country, so that means may be found for destroying the pests before they become too numerous.
		(42) Experimental and demonstration work in destroying ground squirrels, field mice, and other noxious mammals in the national forests, game preserves, and elsewhere: Salaries..... \$6,500.00 Traveling expenses..... 4,500.00 11,000.00 The national forests, national parks, and bird reservations are infested with numerous mammals which are extremely destructive to nursery and forest trees, pasturage, and other vegetation, and largely reduce the value and revenue from these sources. Hence the need of a thorough study of these pests. In addition to destroying them on the public

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Biological Survey—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Biological investigations, 1908, \$44,420—Continued.</i>	<i>Biological investigations, 1909, \$54,420—Cont'd.</i>	<i>Biological investigations, 1910, \$90,170—Cont'd.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
		domain it is planned to demonstrate to those interested the most effective means of controlling these mammals.
		(43) Field study of the birds of Oregon and Washington in relation to fruit growing and agriculture (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge):
		Salaries..... \$1,000.00
		Traveling and other expenses. 1,200.00
		\$2,200.00
		A field study of the food habits of birds in the rapidly developing fruit-growing region of the extreme northwest is necessary in order to supply the fruit growers with needed information for the protection of their crops.
		(44) Biological survey of Arizona (Vernon Bailey, in charge of Geographic Distribution, in charge):
		Salaries..... \$1,000.00
		Traveling and other expenses. 1,000.00
		2,000.00
		A survey of the territory for the purpose of publishing maps and reports on the natural distribution of animal and plant life and natural crop zones and areas. This work will serve as the basis for intelligent crop selection in newly opening sections of the irrigable areas.
		(45) Biological survey of Oregon and Washington (Dr. C. Hart Merriam, chief, in charge):
		Salaries..... \$500.00
		Traveling and other expenses. 500.00
		1,000.00
		Object: Same as in Nos. 2 and 3.
		(46) Destruction of house rats (D. E. Lantz, assistant, in charge):
		Salaries..... \$600.00
		Traveling and other expenses. 200.00
		800.00
		To devise means for the destruction or control of these noxious rodents, which not only cause enormous annual losses but are known to be the main disseminators of the plague and other diseases.
		(47) Deer farming in the United States (D. E. Lantz, assistant, in charge):
		Salaries..... \$400.00
		Traveling and other expenses. 400.00
		800.00
		To learn the best and most profitable methods of raising deer and elk in captivity for market, thus turning to profit much brushy and other now unproductive land.
		(48) Breeding fur-bearing animals (Dr. A. K. Fisher, in charge of Economic Investigations, in charge):
		Salaries..... \$300.00
		Traveling and other expenses. 300.00
		600.00
		Experiments in breeding fur-bearing animals for profit (mink, martin, fisher, and beaver).
		Total amount estimated for Bureau of Biological Survey (an increase over 1909 of \$41,170)..... 103,170.00
Total of all appropriations for Bureau of Biological Survey.....	Total of all appropriations for Bureau of Biological Survey (an increase over 1908 of \$10,000).....	
\$52,000.00	\$62,000.00	
Total expenditures to September 30, 1908.....	51,687.48	
Outstanding liabilities on September 30, 1908 (estimated).....	77.61	
Balance to be turned back in Treasury (estimated).....	234.91	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

DIVISION OF ACCOUNTS AND DISBURSEMENTS.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Division of Accounts and Disbursements, 1908, \$41,790.</i>	<i>Salaries, Division of Accounts and Disbursements, 1909, \$46,690.</i>	<i>Salaries, Division of Accounts and Disbursements, 1910, \$56,090.</i>
Zappone, A. Chief of division and disbursing clerk, at \$2,750. \$2,750.00	1 chief of division and disbursing clerk, who shall be administrative officer of the fiscal affairs of the department. \$3,250.00	1 chief of division and disbursing clerk, who shall be administrative officer of the fiscal affairs of the department. \$3,250.00
Calvert, E. B. Assistant chief of division, at \$2,500. 2,500.00	1 assistant chief of division. 2,500.00	1 assistant chief of division. 2,500.00
Yerby, E. D. Auditor, at \$2,000. 2,000.00	1 auditor. 2,000.00	2 auditors, at \$2,000 each (increase of 1 submitted). 4,000.00
Fagan, M. E. Cashier and chief clerk, at \$2,000. 2,000.00	1 cashier and chief clerk. 2,000.00	1 cashier and chief clerk. 2,000.00
Smith, A. W. Clerk, class four. 1,600.00	1 clerk, class four. 1,800.00	3 clerks, class four (increase of 2 by transfer from the statutory roll of the Forest Service). 5,400.00
Cox, F. C. Clerk, class three. 1,600.00	6 clerks, class three. 9,600.00	6 clerks, class three. 9,600.00
Jones, W. W. Clerk, class three. 1,600.00	8 clerks, class two. 11,200.00	9 clerks, class two (increase of 1 by transfer from the statutory roll of the Forest Service). 12,600.00
Legge, F. W. Clerk, class three. 1,600.00	4 clerks, class one. 4,800.00	6 clerks, class one (increase of 2 submitted). 7,200.00
Montgomery, Anna. Clerk, class three. 1,600.00	3 clerks, at \$1,000 each. 3,000.00	3 clerks, at \$1,000 each. 3,000.00
Nevius, W. J. Clerk, class three. 1,600.00	1 clerk, at \$900. 900.00	1 clerk. 900.00
Forbes, E. E. Clerk, class two. 1,400.00	2 clerks, at \$840 each. 1,680.00	2 clerks, at \$840 each. 1,680.00
Gould, E. D. Clerk, class two. 1,400.00	3 clerks, at \$720 each. 2,160.00	3 clerks, at \$720 each. 2,160.00
Harrington, L. F. Clerk, class two. 1,400.00	1 custodian of records and files. 1,200.00	1 custodian of records and files. 1,200.00
Hubbard, N. S. B. Clerk, class two. 1,400.00	1 messenger. 600.00	1 messenger. 600.00
McCutchen, M. Clerk, class two. 1,400.00		
Quinn, F. H. Clerk, class two. 1,400.00		
Wagner, F. H. Clerk, class two. 1,400.00		
Berryhill, M. B. Clerk, class one. 1,083.33		
Cunningham, S. H. Clerk, class one. 116.67		
Dodson, B. M. Clerk, class one. 1,200.00		
Haskell, Sadia. Clerk, class one. 1,200.00		
Dykes, J. W. Clerk, at \$1,000. 1,000.00		
Handy, R. B., Jr. Clerk, at \$1,000. 1,000.00		
Springer, J. F. Clerk, at \$1,000. 1,000.00		
Martin, F. R. Clerk, at \$900. 900.00		
Cooksey, H. B. Clerk, at \$840. 840.00		
Potter, B. M. Clerk, at \$840. 179.67		
Shuck, W. L. Clerk, at \$720. 660.33		
Hollingshead, J. S. Clerk, at \$720. 42.00		
Lourin, J. D. Clerk, at \$720. 566.00		
Shuck, W. L. Clerk, at \$720. 90.00		
Medley, T. C. Clerk, at \$720. 720.00		
Sexton, M. A. Clerk, at \$720. 720.00		
Murray, W. A. Custodian of records and files, at \$1,000. 1,000.00		
Walker, S. B. Messenger, at \$600. 600.00		
Total. 41,768.00		
Unexpended balance. 22.00		
Total of above appropriation. 41,790.00	Total of above appropriation (an increase over 1908 of \$4,900). 46,690.00	Total amount estimated (an apparent increase over 1909 of \$9,400). 56,090.00
The above force performed the following duties:	The above force are performing the following duties:	NOTE.—The apparent increase is \$9,400, but not considering the places transferred from the Forest Service, there is an actual increase of \$4,400.
Administration:	Administration:	The above force will perform the following duties:
1 chief of division and disbursing clerk. \$2,750.00	1 chief of division and disbursing clerk, who shall be administrative officer of the fiscal affairs of the department. \$3,250.00	Administration:
1 assistant chief of division (in charge of the Weather Bureau branch). 2,500.00	1 assistant chief of division (in charge of the Weather Bureau branch). 2,500.00	1 chief of division and disbursing clerk, who shall be administrative officer of the fiscal affairs of the department. \$3,250.00
1 clerk, at \$1,000. 1,000.00	1 clerk, class one. 1,200.00	1 assistant chief of division (in charge of the Weather Bureau branch). 2,500.00
1 messenger, at \$600. 600.00	1 custodian of records and files. 1,200.00	1 clerk, class one. 1,200.00
6,850.00	1 messenger. 600.00	1 custodian of records and files. 1,200.00
	8,750.00	1 messenger. 600.00
		8,750.00
	NOTE.—On June 30, 1908, for the purpose of systematizing its work, the division was divided into six sections, as follows:	
	Cashier's section:	Cashier's section:
	(This section prepares and mails all checks and handles all moneys received and disbursed.)	1 cashier and chief clerk (in charge of cashier's section in addition to his administrative duties as chief clerk of the division). 2,000.00
	1 cashier and chief clerk (in charge of cashier's section in addition to his administrative duties as chief clerk of the division). \$2,000.00	1 clerk, class three. 1,600.00
	1 clerk, class three. 1,600.00	3 clerks, class two. 4,200.00
	3 clerks, class two. 4,200.00	1 clerk, class one. 1,200.00
	1 clerk, class one. 1,200.00	9,000.00
	9,000.00	
Cash section:		
1 cashier and chief clerk (in charge of cash section in addition to his administrative duties as chief clerk of the division). 2,000.00		
1 clerk, class three. 1,600.00		
3 clerks, class two. 4,200.00		
1 clerk, at \$720. 720.00		
8,520.00		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Division of Accounts and Disbursements—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Division of Accounts and Disbursements, 1908, \$41,790—Continued.</i>	<i>Salaries, Division of Accounts and Disbursements, 1909, \$46,690—Continued.</i>	<i>Salaries, Division of Accounts and Disbursements, 1910, \$56,090—Continued.</i>
The above force performed the following duties—Continued.	The above force are performing the following duties—Con.	The above force will perform the following duties—Cont d.
Bookkeeping section:	Bookkeeper's section:	Bookkeeper's section:
1 clerk, class three..... \$1,600.00	(This section keeps all books pertaining to the fiscal affairs of the department, prepares all requisitions on the Treasury for advances of public funds, indexes all accounts, and has charge of the correspondence with the accounting officers of the Treasury in the settlement of accounts.)	1 clerk, class four..... \$1,800.00
1 clerk, class two..... 1,400.00	1 clerk, class three..... \$1,600.00	1 clerk, class two..... 1,400.00
1 clerk, at \$1,000..... 1,000.00	2 clerks, at \$1,000..... 2,000.00	2 clerks, at \$1,000..... 2,000.00
1 clerk, at \$840..... 840.00	2 clerks, at \$840..... 1,680.00	2 clerks, at \$840..... 1,680.00
	2 clerks, at \$720..... 1,440.00	2 clerks, at \$720..... 1,440.00
		\$8,320.00
\$4,840.00	\$8,120.00	
Auditing section:	Auditing section A:	Auditing section A:
1 auditor..... 2,000.00	(This section audits all salary and reimbursement accounts.)	1 auditor..... 2,000.00
1 clerk, class four..... 1,800.00	1 auditor..... \$2,000.00	2 clerks, class three..... 3,200.00
2 clerks, class three..... 3,200.00	1 clerk, class three..... 1,600.00	2 clerks, class two..... 2,800.00
3 clerks, class two..... 4,200.00	2 clerks, class two..... 2,800.00	1 clerk, class one..... 1,200.00
1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00	
1 clerk, at \$900..... 900.00		9,200.00
1 clerk, at \$840..... 840.00	7,600.00	
2 clerks, at \$720..... 1,440.00		
15,580.00		
	Auditing section B:	Auditing section B:
	(This section audits all purchase, telegraph, and express accounts; also all accounts of the board of consulting scientific experts.)	1 auditor..... \$2,000.00
	1 clerk, class four..... \$1,800.00	1 clerk, class three..... 1,600.00
	1 clerk, class three..... 1,600.00	3 clerks, class two..... 4,200.00
	3 clerks, class two..... 4,200.00	1 clerk, at \$840..... 840.00
	1 clerk, at \$840..... 840.00	
		8,640.00
	8,440.00	
	Freight and transportation section:	Freight and transportation section:
	(This section audits all freight accounts and prepares and issues all bills of lading and passenger and freight transportation requests.)	1 clerk, class four..... \$1,800.00
	1 clerk, class three..... \$1,600.00	1 clerk, class three..... 1,600.00
	1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00
	1 clerk, at \$1,000..... 1,000.00	1 clerk, at \$1,000..... 1,000.00
	1 clerk, at \$720..... 720.00	1 clerk, at \$720..... 720.00
		6,320.00
	4,520.00	
	Miscellaneous section:	Miscellaneous section:
	(This section has charge of the preparation of the several annual reports to Congress and the audit and administrative examination of the accounts and disbursements of the Forest Service.)	1 clerk, class four..... 1,800.00
	1 clerk, class three..... \$1,600.00	1 clerk, class three..... 1,600.00
	1 clerk, class one..... 1,200.00	2 clerks, class one..... 2,400.00
	1 clerk, at \$900..... 900.00	1 clerk, at \$900..... 900.00
		6,700.00
	3,700.00	56,930.00
	50,130.00	
		NOTE.—Of the above, 1 clerk at \$840 will be detailed from the office of the Secretary.....
		840.00
		56,090.00
NOTE.—Of the above, 1 clerk of class two and 1 clerk at \$720 were detailed from the office of the Secretary; in all.....	NOTE.—Of the above, 1 clerk of class two, 1 clerk of class one, and 1 clerk at \$840 are detailed from the office of the Secretary; in all.....	
2,120.00	3,440.00	
41,790.00	46,690.00	

DIVISION OF PUBLICATIONS.

Salaries, Division of Publications, 1908, \$126,550.			Salaries, Division of Publications, 1909, \$139,710.			Salaries, Division of Publications, 1910, \$141,980.		
Hill, George William.....	Editor and chief, at \$3,000.....	\$3,000.00	1 editor, who shall be chief of division.....		\$3,000.00	1 editor, who shall be chief of division.....		\$3,000.00
Arnold, Joseph A.....	Editor and assistant chief, at \$2,250.....	2,250.00	1 editor, who shall be assistant chief of division.....	2,250.00		NOTE.—The following places are transferred to the lump fund:		
Stallings, B. D.....	Associate editor, at \$2,000.....	2,000.00	1 associate editor.....	2,000.00		1 editor, who shall be assistant chief of division.....	\$2,250	
Greathouse, C. H.....	Assistant in charge of indexing, at \$1,800.....	1,800.00	1 assistant in charge of indexing.....	1,800.00		1 associate editor.....	2,000	
Cornman, Ephraim.....	Assistant editor, at \$1,600.....	1,600.00	4 assistant editors, at \$1,600 each.....	6,400.00		1 assistant in charge of indexing.....	1,800	
Harding, W. F.....	Assistant editor, at \$1,600.....	1,600.00	2 editorial clerks, at \$1,400 each.....	2,800.00		4 assistant editors, at \$1,600 each.....	6,400	
Kennedy, G. W.....	Assistant editor, at \$1,600.....	1,600.00	1 assistant in charge of illustration.....	2,000.00		2 editorial clerks, at \$1,400 each.....	2,800	
Thornton, S. Edwin.....	Assistant editor, at \$1,600.....	1,600.00	1 draftsman or photographer.....	1,500.00		1 assistant in charge of illustration.....	2,000	
Searles, Stanley.....	Editorial clerk, at \$1,400.....	\$59.45	2 draftsman or photographers, at \$1,400 each.....	2,800.00		1 draftsman or photographer.....	1,500	
Williams, L. S.....	Assistant in charge of illustration, at \$2,000.....	2,000.00	1 draftsman or photographer.....	1,200.00		2 draftsman or photographers, at \$1,400 each.....	2,800	
Boettcher, A. B.....	Draftsman, at \$1,500.....	1,500.00	1 chief clerk.....	2,000.00		1 assistant in charge of illustration.....	2,000	
Baker, J. N.....	Draftsman, at \$1,400.....	470.55	5 clerks, class one.....	6,000.00		1 draftsman or photographer.....	1,500	
Blanchard, F. W. S.....	Draftsman, at \$1,400.....	929.45	7 clerks, at \$1,000 each.....	7,000.00		2 draftsman or photographers, at \$1,400 each.....	2,800	
Stevenson, J. H.....	Draftsman, at \$1,400.....	1,400.00	1 assistant in charge document section.....	2,000.00		1 draftsman or photographer.....	1,500	
Blanchard, F. W. S.....	Draftsman, at \$1,200.....	403.33	1 assistant in document section.....	1,600.00		1 draftsman or photographer.....	1,200	
Olszewski, Leopold.....	Draftsman, at \$1,200.....	590.00	1 assistant in document section.....	1,400.00				
Mudd, A. I.....	Chief clerk, at \$1,800.....	1,800.00	1 foreman, document section.....	1,400.00				
Bracey, C. E.....	Clerk, class one.....	1,200.00						

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Division of Publications—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Division of Publications, 1908, \$126,550—Continued.</i>	<i>Salaries, Division of Publications, 1909, \$139,710—Continued.</i>	<i>Salaries, Division of Publications, 1910, \$141,980—Continued.</i>
Chapman, Harriet B. Clerk, class one	1 foreman, farmers' bulletin distribu- tion	1 chief clerk.....
Clark, Blanche B. Clerk, class one	2 forewomen, at \$1,200 each.....	1 assistant in charge of document section.....
Nichols, I. J. Clerk, class one	1 chief folder.....	1 assistant in document section.....
Stoddard, M. C. Clerk, class one	1 folder.....	NOTE.—One assistant in docu- ment section, at \$1,400, dropped (included as clerk, class two).
Barnum, Mary E. Clerk, at \$1,000.....	3 folders, at \$840 each.....	1 foreman, miscellaneous distribu- tion (in lieu of one foreman, docu- ment section, dropped).....
Bryan, Emily F. Clerk, at \$1,000.....	3 clerks, at \$900 each.....	NOTE.—One foreman, document section, at \$1,400, dropped (in- cluded as foreman, miscellaneous distribution).
Murray, Anne R. Clerk, at \$1,000.....	16 clerks, at \$840 each.....	1 foreman, farmers' bulletin distribu- tion.....
Goodchild, M. A. Clerk, at \$1,000.....	29 clerks, at \$720 each.....	2 forewomen, at \$1,200 each.....
Lawson, Laura B. Clerk, at \$1,000.....	21 clerks, at \$600 each.....	One clerk, class two (in lieu of one assistant in document section, at \$1,400, dropped).....
Merriam, Lucy R. Clerk, at \$1,000.....	1 photographer.....	5 clerks, class one.....
Plant, Catherine T. Clerk, at \$1,000.....	1 assistant photographer.....	10 clerks, at \$1,000 each (increase of 3 submitted).....
Strong, Blanche..... Clerk, at \$1,000.....	10 skilled laborers, at \$840 each.....	10 clerks, at \$900 each (increase of 7 submitted).....
Handy, R. B. Assistant in charge of document section, at \$2,000.....	8 skilled laborers, at \$720 each.....	25 clerks, at \$840 each (increase of 9 submitted).....
Cleary, F. J. P. Assistant in document section, at \$1,400.....	20 skilled laborers, at \$600 each.....	32 clerks, at \$720 each (increase of 3 submitted).....
Riley, John O. Assistant in document section, at \$1,200.....	1 messenger.....	NOTE.—Twenty-one clerks, at \$600 each dropped, and 1 photog- rapher, at \$1,200, and 1 assistant photographer, at \$840, transferred to the lump fund.
Hendrix, J. H. Foreman in document section, at \$1,400.....	3 messengers, at \$720 each.....	1 chief folder.....
Walter, H. S. Foreman, Farmers' Bulletin dis- tribution, at \$1,200.....	3 messengers, at \$600 each.....	1 folder.....
Edwards, M. E. Forewoman, at \$1,200.....	2 messengers, at \$420 each.....	3 folders, at \$840 each.....
Thorn, M. E. Forewoman, at \$1,200.....	1 messenger boy.....	1 skilled laborer (by transfer from lump fund).....
Lawlor, L. D. Chief folder, at \$1,000.....	1 fireman.....	15 skilled laborers, at \$840 each (in- crease of 5 submitted, 3 by trans- fer from lump fund).....
King, George W. Folder, at \$900.....	Total of above appropriation (an increase over 1908 of \$13,160).....	15 skilled laborers, at \$780 each (sub- mitted).....
Buckley, Margaret..... Folder, at \$840.....	139,710.00	20 skilled laborers, at \$720 each (in- crease of 12 submitted, 5 by trans- fer from lump fund).....
Gordon, William..... Folder, at \$840.....		NOTE.—Twenty skilled laborers, at \$600 each, dropped.
Parker, Annie..... Folder, at \$840.....		2 messengers, at \$840 each (increase of 1 by transfer from lump fund)...
Tull, Ava J. Clerk, at \$900.....		4 messengers, at \$720 each (increase of 1 by transfer from lump fund)...
Burlingame, Sarah H. Clerk, at \$840.....		3 messengers, at \$600 each.....
Carpenter, Stella L. Clerk, at \$840.....		2 messengers, at \$480 each (by trans- fer from lump fund).....
Nelson, Ella M. Clerk, at \$840.....		2 messengers, at \$420 each.....
Duke, A. L. Clerk, at \$840.....		2 messenger boys, at \$360 each (in- crease of 1 by transfer from lump fund).....
Murray, Anne R. Clerk, at \$840.....		1 fireman.....
Saunders, Catherine..... Clerk, at \$840.....		2 laborers, at \$660 each (by transfer from lump fund).....
Myer, Alice..... Clerk, at \$840.....		1 laborer (by transfer from lump fund).....
Smith, Mary A. E. Clerk, at \$840.....		3 charwomen, at \$480 each (by trans- fer from lump fund).....
Whittemore, Sarah A. Clerk, at \$840.....		4 charwomen, at \$240 each (by trans- fer from lump fund).....
Bane, Philena A. Clerk, at \$720.....		
Barber, Fannie C. Clerk, at \$720.....		
Bowman, Grace L. Clerk, at \$720.....		
Burns, Gertrude J. Clerk, at \$720.....		
Chase, Florence A. Clerk, at \$720.....		
Daniels, M. A. Clerk, at \$720.....		
Drayton, Hester E. Clerk, at \$720.....		
Saunders, Catherine..... Clerk, at \$720.....		
Drennon, L. E. Clerk, at \$720.....		
Dunford, Annie..... Clerk, at \$720.....		
Espita, Mamie..... Clerk, at \$720.....		
Galloway, Maud P. Clerk, at \$720.....		
Gardner, L. A. Clerk, at \$720.....		
Haas, C. B. Clerk, at \$720.....		
Hayes, Rose A. Clerk, at \$720.....		
Kammerer, M. M. Clerk, at \$720.....		
King, Minnesota J. Clerk, at \$720.....		
Moore, E. D. Clerk, at \$720.....		
Moselev, M. M. Clerk, at \$720.....		
Mulholland, M. B. Clerk, at \$720.....		
Nelson, Ella M. Clerk, at \$720.....		
Wheeler, F. M. Clerk, at \$720.....		
Owens, Maude..... Clerk, at \$720.....		
Penfield, Cora A. Clerk, at \$720.....		
Powell, Emily..... Clerk, at \$720.....		
Price, Almira..... Clerk, at \$720.....		
Rahn, M. B. Clerk, at \$720.....		
Roe, Ida M. B. Clerk, at \$720.....		
Ross, Matilda..... Clerk, at \$720.....		
Thode, Joachim..... Clerk, at \$720.....		
Willson, A. R. Clerk, at \$720.....		
Wright, M. H. Clerk, at \$720.....		
Anderson, Charles..... Clerk, at \$600.....		
Westlake, B. E. Clerk, at \$600.....		
Armstrong, Marian..... Clerk, at \$600.....		
Asquith, Bertha W. Clerk, at \$600.....		
Gibbs, Geneva..... Clerk, at \$600.....		
Taylor, A. Robena..... Clerk, at \$600.....		
Buffington, B. C. Clerk, at \$600.....		
Calhoun, Katherine B. Clerk, at \$600.....		
Hurd, Eva..... Clerk, at \$600.....		
Carraway, Lucie C. Clerk, at \$600.....		
Connell, L. Clerk, at \$600.....		
Crawford, Margaret..... Clerk, at \$600.....		
McCargar, Gertrude..... Clerk, at \$600.....		
O'Neill, Rosalie D. Clerk, at \$600.....		
Connor, J. A. Clerk, at \$600.....		
Flood, Ida L. Clerk, at \$600.....		
Urner, Mary N. Clerk, at \$600.....		
Watson, Edith H. Clerk, at \$600.....		
Darby, Lottie L. Clerk, at \$600.....		
Johnson, Willette M. Clerk, at \$600.....		
Igoe, Celestine..... Clerk, at \$600.....		
Temple, Susan B. Clerk, at \$600.....		
Davis, Carrie M. Clerk, at \$600.....		
McNerhany, G. M. Clerk, at \$600.....		
Ourand, Myra E. Clerk, at \$600.....		
Warren, Belle D. Clerk, at \$600.....		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (§4 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Division of Publications—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Division of Publications, 1908, \$126,550—Continued.</i>	<i>Salaries, Division of Publications, 1909, \$139,710—Continued.</i>	<i>Salaries, Division of Publications, 1910, \$141,980—Continued.</i>
Duffy, Winifred..... Clerk, at \$600.....	\$600.00	
Derbyshire, Florence E..... Clerk, at \$600.....	543.33	
Hurst, Mabel.....	50.00	
Drayton, Hester E..... Clerk, at \$600.....	116.67	
Goldsmith, Bennie H.....	483.33	
Duvall, Helen L..... Clerk, at \$600.....	20.00	
Wheeler, F. M.....	563.33	
Echtermann, Alma..... Clerk, at \$600.....	600.00	
Felder, Zuleika.....	300.00	
Gittings, Nellie B..... Clerk, at \$600.....	215.00	
Gulick, Jane C.....	48.33	
Hicks, Jennie M..... Clerk, at \$600.....	286.67	
Parkinson, G. E.....	240.00	
Keating, Catherine G..... Clerk, at \$600.....	528.33	
Kennon, G. G..... Clerk, at \$600.....	585.00	
Mack, Ella S..... Clerk, at \$600.....	566.66	
Miller, S. J..... Clerk, at \$600.....	570.84	
Murphy, C. L.....	118.33	
Roche, Annie E..... Clerk, at \$600.....	50.00	
Wulfert, M. A.....	400.00	
Reece, Viola E..... Clerk, at \$600.....	600.00	
Rice, Nellie..... Clerk, at \$600.....	600.00	
Riggles, Bertha M.....	50.00	
Rozzelle, Keith K..... Clerk, at \$600.....	121.67	
Welborn, Ella.....	425.00	
Rumbaugh, Bessie G..... Clerk, at \$600.....	493.33	
Spalding, Katherine O..... Clerk, at \$600.....	600.00	
Sullivan, Helen C..... Clerk, at \$600.....	598.33	
Sutton, Virginia..... Clerk, at \$600.....	600.00	
Thompson, Augusta H..... Clerk, at \$600.....	600.00	
Thorpe, Jeannette A..... Clerk, at \$600.....	595.00	
Wood, Sadie S..... Clerk, at \$600.....	600.00	
Clime, Winfield S..... Photographer, at \$1,200.....	1,200.00	
Bullock, Julia E..... Assistant photographer, at \$840.....	840.00	
Fowler, Lorena C..... Skilled laborer, at \$720.....	720.00	
Martin, E. L..... Skilled laborer, at \$720.....	720.00	
Poff, Matt..... Skilled laborer, at \$720.....	720.00	
Smith, Ida G..... Skilled laborer, at \$720.....	720.00	
Towers, C. W..... Skilled laborer, at \$720.....	720.00	
Wanstall, Harriet..... Skilled laborer, at \$720.....	704.00	
Williams, H. H..... Skilled laborer, at \$720.....	720.00	
Young, William H..... Skilled laborer, at \$720.....	720.00	
Adams, Jacob..... Skilled laborer, at \$600.....	555.00	
Apperson, M. L..... Skilled laborer, at \$600.....	596.66	
Augur, Laura..... Skilled laborer, at \$600.....	591.66	
Barbour, William H.....	306.67	
Buenhe, August..... Skilled laborer, at \$600.....	16.67	
Ray, George E.....	226.66	
Danforth, L. V..... Skilled laborer, at \$600.....	600.00	
Emery, M. E..... Skilled laborer, at \$600.....	600.00	
Gill, A. B..... Skilled laborer, at \$600.....	600.00	
Grant, C. C..... Skilled laborer, at \$600.....	600.00	
Hemingway, Mary K..... Skilled laborer, at \$600.....	600.00	
Herrity, Marie A.....	15.00	
Laird, E. A..... Skilled laborer, at \$600.....	503.33	
Lerutand, Louise G.....	65.00	
Hoey, Jennie G..... Skilled laborer, at \$600.....	600.00	
Jones, Vester S..... Skilled laborer, at \$600.....	548.33	
Lewis, Ida J..... Skilled laborer, at \$600.....	190.00	
Locke, Louisa K.....	350.00	
Mulvehill, Elizabeth..... Skilled laborer, at \$600.....	600.00	
Posey, Kate..... Skilled laborer, at \$600.....	600.00	
Roby, Hattie..... Skilled laborer, at \$600.....	591.67	
Trudeau, E. L..... Skilled laborer, at \$600.....	600.00	
Turner, Amelia..... Skilled laborer, at \$600.....	600.00	
Twomey, John M..... Skilled laborer, at \$600.....	600.00	
Vrooman, Minnie S..... Skilled laborer, at \$600.....	600.00	
Payne, Charles E..... Messenger, at \$840.....	840.00	
Peck, Gerald E..... Messenger, at \$720.....	720.00	
Pfunder, William..... Messenger, at \$720.....	720.00	
Quinn, Maggie..... Messenger, at \$720.....	720.00	
Carter, Joseph C..... Messenger, at \$600.....	600.00	
Long, Michael..... Messenger, at \$600.....	600.00	
Mee, Homer..... Messenger, at \$600.....	600.00	
Key, Richard C..... Messenger, at \$420.....	180.83	
Moore, L. W.....	235.67	
MacFate, Joseph W..... Messenger, at \$420.....	420.00	
Bailey, Charles G. G.....	264.00	
Moore, L. W..... Messenger boy, at \$360.....	66.00	
Mudd, George W.....	30.00	
Angelo, F. M..... Fireman, at \$720.....	720.00	
Total.....	124,304.75	
Unexpended balance.....	2,245.25	
Total of above appropriation.....	126,550.00	

The above force performed the following duties:

Administration:

1 editor, who shall be chief of division..... \$3,000.00
1 editor, who shall be assistant chief of division..... 2,250.00

The above force are performing the following duties:

Administration:

1 editor, who shall be chief of division..... \$3,000.00
1 editor, who shall be assistant chief of division..... 2,250.00

The above force will perform the following duties:

Administration:

1 editor, who shall be chief of division..... \$3,000.00
1 chief clerk..... 2,000.00
1 clerk, class one..... 1,200.00
1 clerk..... 1,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Division of Publications—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Division of Publications, 1908, \$126,550—Continued.</i>	<i>Salaries, Division of Publications, 1909, \$139,710—Continued.</i>	<i>Salaries, Division of Publications, 1910, \$141,980—Continued.</i>
The above force performed the following duties—Continued.	The above force are performing the following duties—Cont'd.	The above force will perform the following duties—Cont'd.
Administration—Continued.	Administration—Continued.	Administration—Continued.
1 chief clerk..... \$1,800.00	1 chief clerk..... \$2,000.00	2 clerks, at \$840 each. \$1,680.00
1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00	1 skilled laborer..... 720.00
1 clerk..... 1,000.00	1 clerk..... 1,000.00	1 messenger..... 420.00
2 clerks, at \$720 each..... 1,440.00	2 clerks, at \$840 each. 1,680.00	1 charwoman..... 480.00
1 messenger..... 840.00	1 messenger..... 600.00	
1 messenger..... 420.00		
	\$11,730.00	\$10,500.00
Correspondence and files:	Correspondence and files:	Correspondence and files:
1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00
1 clerk..... 1,000.00	2 clerks, at \$1,000 each. 2,000.00	2 clerks, at \$1,000 each. 2,000.00
1 clerk..... 900.00	1 clerk..... 900.00	4 clerks, at \$900 each. 3,600.00
4 clerks, at \$840 each. 3,360.00	4 clerks, at \$840 each. 3,360.00	5 clerks, at \$840 each. 4,200.00
5 clerks, at \$720 each. 3,600.00	7 clerks, at \$720 each. 5,040.00	7 clerks, at \$720 each. 5,040.00
7 clerks, at \$600 each. 4,200.00	4 clerks, at \$600 each. 2,400.00	1 folder..... 900.00
1 folder..... 840.00	1 folder..... 900.00	1 skilled laborer..... 840.00
1 skilled laborer..... 600.00	1 skilled laborer..... 840.00	1 messenger..... 600.00
1 messenger..... 720.00	1 messenger..... 420.00	
	17,060.00	18,380.00
Editorial section:	Editorial section:	Editorial section:
1 associate editor..... 2,000.00	1 associate editor..... 2,000.00	1 clerk..... 900.00
4 assistant editors, at \$1,600 each. 6,400.00	4 assistant editors, at \$1,600 each. 6,400.00	1 messenger..... 480.00
1 editorial clerk..... 1,400.00	2 editorial clerks, at \$1,400 each. 2,800.00	
1 clerk..... 840.00	1 clerk..... 840.00	
		1,380.00
	12,040.00	
Illustration section:	Illustration section:	Illustration section:
1 assistant in charge of illustrations. 2,000.00	1 assistant in charge of illustrations. 2,000.00	1 clerk, class 1..... 1,200.00
1 draftsman or clerk..... 1,500.00	1 draftsman or photographer..... 1,500.00	2 clerks, at \$840 each. 1,680.00
2 draftsmen or clerks, at \$1,400 each. 2,800.00	2 draftsmen or photographers, at \$1,400 each. 2,800.00	1 skilled laborer..... 840.00
1 draftsman or clerk..... 1,200.00	1 draftsman or photographer..... 1,200.00	1 skilled laborer..... 720.00
1 clerk, class 1..... 1,200.00	1 clerk, class 1..... 1,200.00	1 messenger boy..... 360.00
1 clerk..... 720.00	1 clerk, class 1..... 1,200.00	1 charwoman..... 240.00
1 clerk..... 600.00	1 clerk..... 840.00	1 charwoman..... 480.00
1 photographer..... 1,200.00	1 clerk..... 720.00	
1 assistant photographer..... 840.00	1 photographer..... 1,200.00	
1 messenger..... 600.00	1 assistant photographer..... 840.00	
	1 messenger boy..... 360.00	
		5,520.00
	12,660.00	
Index section:	Index section:	Index section:
1 assistant in charge of indexing..... 1,800.00	1 assistant in charge of indexing..... 1,800.00	2 clerks, at \$1,000 each. 2,000.00
1 clerk..... 840.00	2 clerks, at \$1,000 each. 2,000.00	2 clerks, at \$840 each. 1,680.00
3 clerks, at \$720 each..... 2,160.00	3 clerks, at \$720 each. 2,160.00	2 clerks, at \$720 each. 1,440.00
	1 clerk..... 600.00	1 messenger..... 600.00
	6,560.00	5,720.00
Document section:	Document section:	Document section:
1 assistant in charge of document section..... 2,000.00	1 assistant in charge of document section. 2,000.00	1 assistant in charge of document section. 2,000.00
1 assistant in document section..... 1,400.00	1 assistant in document section..... 1,600.00	1 assistant in document section..... 1,600.00
1 assistant in document section..... 1,200.00	1 assistant in document section..... 1,400.00	1 foreman, miscellaneous distribution..... 1,400.00
1 foreman in document section..... 1,400.00	1 foreman document section..... 1,400.00	1 foreman, farmers' bulletin distribution. 1,200.00
1 foreman farmers' bulletin distribution..... 1,200.00	1 foreman, farmers' bulletin distribution. 1,200.00	2 forewomen, at \$1,200 each. 2,400.00
2 forewomen, at \$1,200 each. 2,400.00	2 forewomen, at \$1,200 each. 2,400.00	1 clerk, class 2..... 1,400.00
2 clerks, at \$1,200 each. 2,400.00	2 clerks, class 1..... 2,400.00	2 clerks, class 1..... 2,400.00
5 clerks, at \$1,000 each. 5,000.00	2 clerks, at \$1,000 each. 2,000.00	5 clerks, at \$1,000 each. 5,000.00
1 chief folder..... 1,000.00	1 chief folder..... 1,000.00	5 clerks, at \$900 each. 4,500.00
1 folder..... 900.00	3 folders, at \$840 each. 2,520.00	14 clerks, at \$840 each. 11,760.00
2 folders, at \$840 each. 1,680.00	2 clerks, at \$900 each. 1,800.00	23 clerks, at \$720 each. 16,560.00
1 clerk..... 840.00	8 clerks, at \$840 each. 6,720.00	1 chief folder..... 1,000.00
18 clerks, at \$720 each. 12,960.00	18 clerks, at \$720 each. 12,960.00	3 folders, at \$840 each. 2,520.00
24 clerks, at \$600 each. 14,400.00	16 clerks, at \$600 each. 9,600.00	1 skilled laborer..... 900.00
8 skilled laborers, at \$720 each. 5,760.00	9 skilled laborers, at \$840 each. 7,560.00	13 skilled laborers, at \$840 each. 10,920.00
19 skilled laborers, at \$600 each. 11,400.00	8 skilled laborers, at \$720 each. 5,760.00	15 skilled laborers, at \$780 each. 11,700.00
2 messengers, at \$720 each. 1,440.00	20 skilled laborers, at \$600 each. 12,000.00	18 skilled laborers, at \$720 each. 12,960.00
2 messengers, at \$600 each. 1,200.00	1 messenger..... 840.00	2 messengers, at \$840 each. 1,680.00
1 messenger..... 420.00	3 messengers, at \$720 each. 2,160.00	4 messengers, at \$720 each. 2,880.00
1 messenger boy..... 360.00	2 messengers, at \$600 each. 1,200.00	1 messenger..... 600.00
1 fireman..... 720.00	1 messenger..... 420.00	1 messenger..... 480.00
	1 fireman..... 720.00	1 messenger..... 420.00
		1 messenger boy..... 360.00
		1 fireman..... 720.00
		2 laborers, at \$660 each. 1,320.00
		1 laborer..... 600.00
		1 charwoman..... 480.00
		3 charwomen, at \$240 each. 720.00
		100,480.00
		141,980.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (§4 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Division of Publications—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Publications, Department of Agriculture, 1908, \$35,000.</i>	<i>Publications, Department of Agriculture, 1909, \$40,000.</i>	<i>Publications, Department of Agriculture, 1910, \$70,000.</i>
Lump fund salaries in Washington..... \$17,605.01	Lump fund salaries in Washington..... \$20,000.00	Lump fund salaries in Washington..... \$39,000.00
Stationery..... 7,553.28	Stationery..... 9,000.00	Stationery..... 11,500.00
Miscellaneous supplies and services, equipment, books, machinery, etc..... 1,978.04	Miscellaneous supplies and services, equipment, books, machinery, etc..... 1,555.00	Miscellaneous supplies and services, equipment, books, machinery, etc..... 7,555.00
Furniture..... 421.66	Furniture, fixtures, etc..... 1,000.00	Furniture, fixtures, etc..... 1,000.00
Freight..... 2.81	Freight..... 5.00	Freight..... 5.00
Express..... 8.50	Express..... 10.00	Express..... 10.00
Telegraph..... 1.99	Telegraph..... 5.00	Telegraph..... 5.00
Telephone..... 47.61	Telephone..... 75.00	Telephone..... 75.00
Rent..... 5,060.01	Rent..... 5,000.00	Rent..... 5,000.00
Gas and electricity..... 782.15	Gas and electricity..... 850.00	Gas and electricity..... 850.00
Apparatus, instruments, and laboratory material..... 1,407.78	Apparatus, instruments, and laboratory material..... 2,500.00	Apparatus, instruments, and laboratory material..... 5,000.00
Total expenditures to September 30, 1908..... 34,868.84	Total amount of above appropriation (an increase over 1908 of \$5,000)..... 40,000.00	Total amount estimated (an apparent increase over 1909 of \$30,000)..... 70,000.00
Outstanding liabilities on September 30, 1908 (estimated).... 18.49		
Balance to be turned back in Treasury (estimated)..... 112.67		
Total amount of above appropriation..... 35,000.00		
<p>NOTE.—The Division of Publications has no projects. It is the publishing house of the Department of Agriculture, and concerns itself with doing as efficiently and promptly as possible the work required of it by the various bureaus, divisions, and offices of the department, the precise amount of which can not be foreseen. Its force comprises editors, proof readers, compilers, indexers, abstractors, artists, draftsmen, engravers, and photographers, together with clerks and skilled and unskilled laborers engaged in the distribution of publications.</p> <p>The division is charged with the preparation and editing of the manuscripts for the publications of the department, including the Yearbook, annual reports, bulletins, etc.; the preparation, printing, and distribution of Farmers' Bulletins; supervision of the printing and binding done for the department, in both the main and branch printing offices; preparation of drawings for illustrations, of wood engraving; photographic work of various kinds, including lantern slides, bromide enlargements for lecturing purposes, and photographs for half tones for illustrating work; distribution of department publications, and preparation and distribution of official information and advance notices of publications to agricultural writers and papers.</p> <p>The appropriation for the fiscal year 1908 was expended for salaries, rent, and necessary furniture, and supplies used in editorial work, indexing, photographic and artistic work, and the distribution of documents.</p>		
Total of all appropriations for Division of Publications..... 161,550.00	Total of all appropriations for Division of Publications (an increase over 1908 of \$18,160)..... 179,710.00	Total amount estimated for the Division of Publications (an increase over 1909 of \$32,270)..... 211,980.00
Total expenditures to September 30, 1908..... 159,173.59		
Outstanding liabilities on September 30, 1908 (estimated).... 18.49		
Balance to be turned back in Treasury (estimated)..... 2,357.92		
<p>NOTE.—In addition to the sums appropriated for the Division of Publications, shown in the foregoing statements, the division supervised the expenditure of the fund appropriated in the Sundry Civil Appropriation Act for the printing and binding of the Department of Agriculture. For the fiscal year 1908 that fund was \$433,750. The total of all funds the expenditure of which was supervised by the Division of Publications amounted, therefore, to \$595,300.</p> <p>NOTE.—Exclusive of \$460,000 appropriated in the Sundry Civil Appropriation Act for the printing and binding of the Department of Agriculture and being expended under the supervision of the Division of Publications.</p> <p>NOTE.—Exclusive of \$510,000 estimated for the printing and binding of the Department of Agriculture, to be included in the Sundry Civil Appropriation Act, but expended under the supervision of the Division of Publications.</p>		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1232); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

BUREAU OF STATISTICS.

Detailed expenditures for the fiscal year ended June 30, 1908.		Appropriations for the current fiscal year ending June 30, 1909.		Estimated expenditures for the fiscal year ending June 30, 1910.	
<i>Salaries, Bureau of Statistics, 1908, \$97,040.</i>		<i>Salaries, Bureau of Statistics, 1909, \$96,640.</i>		<i>Salaries, Bureau of Statistics, 1910, \$104,580</i>	
Olmsted, V. H.	Chief of Bureau, at \$3,500	1 statistician, who shall be chief of bureau	\$3,500.00	1 statistician, who shall be chief of bureau	\$3,500.00
Murray, Nat. C.	Assistant statistician, at \$2,200	1 assistant statistician, who shall be assistant chief of bureau	2,500.00	1 assistant statistician, who shall be assistant chief of bureau	2,500.00
Daugherty, Charles M.	Editorial assistant, at \$2,300	1 chief clerk	1,800.00	1 chief clerk	1,800.00
Rutter, F. R.		6 clerks, class four	10,800.00	6 clerks, class four	10,800.00
Jones, S. A.	Chief clerk, at \$1,800	9 clerks, class three	14,400.00	9 clerks, class three	14,400.00
Lundy, E. J.		12 clerks, class two	16,800.00	12 clerks, class two	16,800.00
Andrews, Frank	Clerk, class four	2 clerks, at \$1,300 each	2,600.00	2 clerks, at \$1,300 each	2,600.00
Stone, I. W.		14 clerks, class one	16,800.00	16 clerks, class one (increase of 2 by transfer from lump fund)	19,200.00
Blair, F. J.	Clerk, class four	8 clerks, at \$1,000 each	8,000.00	10 clerks, at \$1,000 each (increase of 2 submitted, 1 by transfer from lump fund)	10,000.00
Ferguson, G. R.	Clerk, class four	4 clerks, at \$900 each	3,600.00	6 clerks, at \$900 each (increase of 2 submitted, 1 by transfer from lump fund)	5,400.00
Graham, H. C.	Clerk, class four	4 clerks, at \$840 each	3,360.00	5 clerks, at \$840 each (increase of 1 submitted)	4,200.00
Rutter, F. R.	Clerk, class three	10 clerks, at \$720 each	7,200.00	10 clerks, at \$720 each	7,200.00
Smith, R. F.		6 clerks, at \$600 each	3,600.00	NOTE.—Six clerks, at \$600 each, dropped.	
Thompson, E. S.	Clerk, class three	2 messengers, at \$840 each	1,680.00	2 messengers, at \$840 each	1,680.00
Andrews, Frank		Total of above appropriation (decrease from 1908 of \$400)	96,640.00	1 messenger (by transfer from lump fund)	660.00
Stone, I. W.	Clerk, class three			1 messenger (by transfer from lump fund)	480.00
Blodgett, J. H.	Clerk, class three			2 laborers, at \$720 each (by transfer from lump fund)	1,440.00
Covert, J. R.	Clerk, class three			1 laborer (by transfer from lump fund)	660.00
Graham, H. C.	Clerk, class three			1 charwoman (by transfer from lump fund)	540.00
Hauser, A. M.	Clerk, class three			2 charwomen, at \$360 each (by transfer from lump fund)	720.00
Hammargren, E. L.	Clerk, class three			Total amount estimated (an apparent increase of \$7,940)	104,580.00
Leith, C. A.	Clerk, class three			NOTE.—The apparent increase is \$7,940, but not considering the places transferred from the lump fund there is an actual decrease of \$860.	
Smedes, H. R.	Clerk, class three				
Smith, Middleton	Clerk, class three				
Stier, D. W.	Clerk, class three				
Cooney, F. C.	Clerk, class two				
Hauser, A. M.	Clerk, class two				
York, A. B.	Clerk, class two				
Latham, E. G.	Clerk, class two				
McKenna, R. T.	Clerk, class two				
Reynolds, F. A.	Clerk, class two				
O'Donoghue, Clara	Clerk, class two				
Pepper, J. G.	Clerk, class two				
Quinn, E. H.	Clerk, class two				
Rothrock, Leulah	Clerk, class two				
Safford, M. F.	Clerk, class two				
Schaaks, J. J.	Clerk, class two				
Schmidt, Flora	Clerk, class two				
Shanahan, M. E.	Clerk, class two				
Burch, Lillian	Clerk, at \$1,300				
Fletcher, C. P.	Clerk, at \$1,300				
Adams, S. G.	Clerk, class one				
Bowie, M. S.	Clerk, class one				
Clark, E. L.	Clerk, class one				
Finckel, C. B.	Clerk, class one				
Jones, L. M.	Clerk, class one				
Lancaster, C. M.	Clerk, class one				
Lee, W. D.	Clerk, class one				
York, A. B.	Clerk, class one				
Love, A. H.	Clerk, class one				
Skinner, Sarah	Clerk, class one				
Walden, Celena	Clerk, class one				
Wright, A. M.	Clerk, class one				
Atwell, H. J.	Clerk, at \$1,000				
Blankman, R. B.	Clerk, at \$1,000				
Bollinger, Lewis	Clerk, at \$1,000				
Fisher, Gertrude	Clerk, at \$1,000				
Peabody, John	Clerk, at \$1,000				
Ingram, M. M.	Clerk, at \$1,000				
King, W. M.	Clerk, at \$1,000				
Lee, W. D.	Clerk, at \$1,000				
Yonce, S. H.	Clerk, at \$1,000				
Pierce, M. R.	Clerk, at \$1,000				
Phillips, Nettie	Clerk, at \$1,000				
Wharton, V. K.	Clerk, at \$1,000				
Woodward, E. G.	Clerk, at \$1,000				
Atwell, H. J.	Clerk, at \$900				
Bostwick, Helen M.	Clerk, at \$900				
Elliott, Perry	Clerk, at \$900				
Jenkins, S. E.	Clerk, at \$900				
Fisher, Gertrude	Clerk, at \$900				
Lee, W. D.	Clerk, at \$900				
Peabody, John	Clerk, at \$900				
Wood, M. L.	Clerk, at \$900				
Ballard, N. P.	Clerk, at \$900				
Bostwick, Helen M.	Clerk, at \$840				
Sartor, L. E.	Clerk, at \$840				
Cavanagh, Jeanneatte L.	Clerk, at \$840				
Peabody, John	Clerk, at \$840				
Connor, R. L.	Clerk, at \$840				
Noah, Esther	Clerk, at \$840				
Alexander, S. C.	Clerk, at \$720				
Babbitt, George H.	Clerk, at \$720				
Ballard, N. P.	Clerk, at \$720				
Cannon, S. P.	Clerk, at \$720				
Bell, Florence	Clerk, at \$720				
Blanford, Eli M.	Clerk, at \$720				
Elliott, Perry	Clerk, at \$720				
Bostwick, Helen M.	Clerk, at \$720				
Michaels, M. M.	Clerk, at \$720				
Cavanagh, Jeanneatte L.	Clerk, at \$720				
Fitch, William R.	Clerk, at \$720				
Raymond, M. J.	Clerk, at \$720				
Collins, F. P.	Clerk, at \$720				
Eaton, C. E.	Clerk, at \$720				
Lederer, B. B.	Clerk, at \$720				
Blanford, Eli M.	Clerk, at \$600				
Claycomb, Clinton C.	Clerk, at \$600				
Fitch, William R.	Clerk, at \$600				
Pray, Lloyd	Clerk, at \$600				

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Statistics—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<p><i>Salaries, Bureau of Statistics, 1908, \$97,040—Continued.</i></p> <p>Hess, M. H. } Clerk, at \$600..... } \$298.33 Hilliary, M. T. } 148.33 Michaels, M. M. } 75.00 Murdock, W. B. Clerk, at \$600..... 275.00 Raymond, M. J. Clerk, at \$600..... 400.00 Brent, N. W. Messenger, at \$840..... 840.00 Wharton, J. J. Messenger, at \$840..... 823.67</p> <p>Total..... 90,988.74 Unexpended balance..... 6,051.26</p> <p>Total of above appropriation..... 97,040.00</p> <p>The above force performed the following duties:</p> <p>Administrative and executive: Office of the statistician— 1 statistician..... \$3,500 1 assistant statistician..... 2,200 1 clerk, class four..... 1,800 2 clerks, class three..... 3,200 1 clerk, class two..... 1,400 \$12,100</p> <p>Duties: The administrative control of the work of the bureau and the supervision and inspection of its field service; supervision of original statistical investigations and reports; final computations for and preparation of the monthly crop reports; and general correspondence of the bureau on statistical and administrative subjects.</p> <p>Office of the chief clerk— 1 chief clerk..... \$1,800 1 clerk, class one..... 1,200 1 clerk, at \$1,000..... 1,000 1 clerk, at \$720..... 720 1 clerk at \$600..... 600 5,320 \$17,420.00</p> <p>Duties: General administrative supervision, under the direction of the statistician, of the work and personnel of the bureau's employees; preparation of fiscal statements and estimates; purchase and distribution of supplies; care of files, accounts, and time and cost records; certification of vouchers for salaries, supplies, and traveling expenses; custody and issue of the supply of Congressional Records, and of congressional bills, resolutions, etc., furnished the Agricultural Department, and the maintenance of a record of the status of all bills, etc., relating directly or indirectly to the work of the department; and correspondence relating to the above-mentioned matters.</p> <p>Division of domestic crop reports: 1 statistical expert in charge..... \$1,800 1 clerk, class three..... 1,600 1 clerk, at \$1,300..... 1,300 1 clerk, class one..... 1,200 1 clerk, at \$1,000..... 1,000 6,900</p> <p>Duties: Engaged primarily and principally in the correspondence with county and township crop correspondents and the compilation and tabulation of their reports for inclusion in the monthly crop reports, which show the acreage, condition, and probable yield during the growing season, and the ascertained yield and value after the crops are gathered of the principal agricultural products of the United States; and, in the month of February, the number and value of farm animals.</p> <p>Section of township reports— 1 clerk, class four..... \$1,800 1 clerk, class three..... 1,600 5 clerks, class two..... 7,000 6 clerks, class one..... 7,200 5 clerks, at \$1,000..... 5,000 1 clerk, at \$900..... 900 1 clerk, at \$840..... 840 2 clerks, at \$720..... 1,440 2 clerks, at \$600..... 1,200 26,980</p> <p>Duties: Tabulate returns from township correspondents throughout the United States for inclusion in the monthly crop report; do miscellaneous compiling and tabulating work in connection with preparation of bulletins, statements, etc.; conduct the routine correspondence involved in maintaining a list of satisfactory crop correspondents throughout the township sections.</p> <p>Section of county reports— 2 clerks, class four..... \$3,600 1 clerk, class three..... 1,600 3 clerks, class two..... 4,200 1 clerk, at \$1,300..... 1,300 10,700</p> <p>Duties: Tabulate returns from county correspondents for inclusion in the monthly crop re-</p>	<p><i>Salaries, Bureau of Statistics, 1909, \$96,640—Continued.</i></p> <p>The above force is performing the following duties: Administrative and executive: Office of the statistician— 1 statistician..... \$3,500 1 assistant statistician..... 2,500 1 clerk, class four..... 1,800 3 clerks, class three..... 4,800 \$12,600</p> <p>Office of the chief clerk— 1 chief clerk..... \$1,800 1 clerk at \$1,300..... 1,300 1 clerk, class one..... 1,200 1 clerk, at \$1,000..... 1,000 1 clerk, at \$720..... 720 1 clerk, at \$600..... 600 1 messenger, at \$840..... 840 7,460 \$20,060.00</p> <p>Division of domestic crop reports: 1 clerk, class three..... \$1,600 1 clerk, class two..... 1,400 1 clerk, class one..... 1,200 1 clerk, at \$1,000..... 1,000 5,200</p> <p>Section of township reports— 1 clerk, class three..... \$1,600 4 clerks, class two..... 5,600 1 clerk, at \$1,300..... 1,300 7 clerks, class one..... 8,400 3 clerks, at \$1,000..... 3,000 1 clerk, at \$900..... 900 1 clerk, at \$840..... 840 2 clerks, at \$720..... 1,440 2 clerks, at \$600..... 1,200 24,280</p> <p>Section of county reports— 2 clerks, class four..... \$3,600 1 clerk, class three..... 1,600 4 clerks, class two..... 5,600 10,800</p>	<p><i>Salaries, Bureau of Statistics, 1910, \$104,580—Continued.</i></p> <p>The above force will perform the following duties: Administrative and executive: Office of the statistician— 1 statistician..... \$3,500 1 assistant statistician..... 2,500 1 clerk, class four..... 1,800 3 clerks, class three..... 4,800 \$12,600</p> <p>Office of the chief clerk— 1 chief clerk..... \$1,800 1 clerk, at \$1,300..... 1,300 1 clerk, class one..... 1,200 1 clerk, at \$1,000..... 1,000 1 clerk, at \$840..... 840 1 clerk, at \$720..... 720 1 messenger, at \$840..... 840 1 messenger, at \$660..... 660 1 messenger, at \$480..... 480 2 laborers, at \$720..... 1,440 1 laborer, at \$660..... 660 1 charwoman, at \$540..... 540 2 charwomen, at \$360..... 720 12,200 \$24,800.00</p> <p>Division of domestic crop reports: 1 clerk, class three..... \$1,600 1 clerk, class two..... 1,400 1 clerk, class one..... 1,200 1 clerk, at \$1,000..... 1,000 5,200</p> <p>Section of township reports— 1 clerk, class three..... \$1,600 4 clerks, class two..... 5,600 1 clerk, at \$1,300..... 1,300 7 clerks, class one..... 8,400 4 clerks, at \$1,000..... 4,000 1 clerk, at \$900..... 900 1 clerk, at \$840..... 840 2 clerks, at \$720..... 1,440 24,080</p> <p>Section of county reports— 2 clerks, class four..... \$3,600 1 clerk, class three..... 1,600 4 clerks, class two..... 5,600 10,800</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Statistics—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Bureau of Statistics, 1908, \$97,040—Continued.</i>	<i>Salaries, Bureau of Statistics, 1909, \$96,640—Continued.</i>	<i>Salaries, Bureau of Statistics, 1910, \$104,580—Continued.</i>
The above force performed the following duties—Continued.	The above force is performing the following duties—Cont'd.	The above force will perform the following duties—Cont'd.
port; conduct the routine correspondence involved in maintaining a list of satisfactory crop correspondents throughout the territories under their charge; miscellaneous compiling and tabulating work in connection with preparation of bulletins, statements, etc.		
Mailing section—	Mailing section—	Mailing section—
2 clerks, class one.....\$2,400	3 clerks, class one...\$3,600	3 clerks, class one...\$3,600
1 clerk, at \$840.....840	1 clerk, at \$840.....840	1 clerk, at \$1,000....1,000
2 clerks, at \$720.....1,440	2 clerks, at \$720.....1,440	1 clerk, at \$840.....840
2 clerks, at \$600.....1,200	1 clerk, at \$600.....600	2 clerks, at \$720.....1,440
1 messenger, at \$840.....840		
	\$6,480	\$6,880
\$51,300.00	\$46,760.00	\$46,960.00
Duties: Mailing, receiving, and distributing statistical inquiries and reports, including township, county, and special returns.		
Editorial division and library:	Editorial division and library:	Editorial division and library:
1 statistical expert in charge.....2,300		
Editorial section—	Editorial section—	Editorial section—
2 clerks, class three.....3,200	1 clerk, class four...\$1,800	1 clerk, class four...\$1,800
1 clerk, class two.....1,400	2 clerks, class three. 3,200	2 clerks, class three. 3,200
1 clerk, at \$1,000.....1,000	1 clerk, class one...1,200	3 clerks, class one...3,600
1 messenger, at \$840.....840		
	6,200	8,600
Duties: Editing of bulletins and other publications of the bureau; preparing statistical reports and bulletins on matters relating to agriculture; editing of, and preparation of miscellaneous data for, the Crop Reporter; research and compilation of statistical data requested by statesmen, economists, statisticians, educational institutions, commercial and agricultural organizations, the federal departments, state and foreign governments, and private individuals; translation of letters, papers, and miscellaneous publications from foreign languages.		
Library section—	Library section—	Library section—
1 clerk, class one.....1,200	1 clerk, class two...1,400	1 clerk, class two...1,400
1 clerk, at \$1,000.....1,000	1 clerk, at \$1,000....1,000	1 clerk, at \$1,000....1,000
	1 clerk, at \$720.....720	1 clerk, at \$720.....720
	1 messenger, at \$840. 840	1 messenger, at \$840. 840
	3,960	3,960
Duties: Care and management of the bureau's extensive statistical library; examination and indexing statistical information found in home and foreign government and state reports, publications of commercial organizations, and in domestic and foreign newspapers.		
Typewriting section—	Typewriting section—	Typewriting section—
1 clerk, at \$900.....900	1 clerk, at \$1,000....1,000	1 clerk, at \$1,000....1,000
1 clerk, at \$840.....840	1 clerk, at \$900.....900	1 clerk, at \$900.....900
2 clerks, at \$720.....1,440	1 clerk, at \$840.....840	1 clerk, at \$840.....840
	1 clerk, at \$720.....720	1 clerk, at \$720.....720
	3,460	3,460
14,120.00	13,620.00	16,020.00
Division of Foreign Markets, now the Division of Investigations of Production and Distribution:	Division of Investigations of Production and Distribution:	Division of Investigations of Production and Distribution:
1 clerk, class four.....\$1,800	2 clerks, class four.....\$3,600	2 clerks, class four.....\$3,600
2 clerks, class three.....3,200	1 clerk, class three.....1,600	1 clerk, class three.....1,600
2 clerks, class two.....2,800	2 clerks, class two.....2,800	2 clerks, class two.....2,800
2 clerks, at \$900.....1,800	1 clerk, class one.....1,200	1 clerk, class one.....1,200
1 clerk, at \$840.....840	1 clerk, at \$1,000....1,000	1 clerk, at \$1,000....1,000
3 clerks, at \$720.....2,160	2 clerks, at \$900.....1,800	4 clerks, at \$900.....3,600
1 clerk, at \$600.....600	1 clerk, at \$840.....840	1 clerk, at \$840.....840
	3 clerks, at \$720.....2,160	3 clerks, at \$720.....2,160
	2 clerks, at \$600.....1,200	
	16,200.00	16,800.00
Duties: The investigation of the production of wealth on farms, the distribution of farm products at home and abroad, and the economic conditions pertaining to the agricultural element of the population. Particular attention has been devoted to such subjects as the production and consumption of meat and the foreign markets for the national surplus of meat; the supply of agricultural products generally to foreign markets; foreign production in products which are the subjects of competition with those of this country; transportation of products of the United States and competing countries to foreign markets, including freight rates by rail and water and other costs incident to placing them on the foreign markets; consideration of the agricultural surplus in the United States and foreign countries; the exports and imports of the principal exporting and importing countries; preparation of bulletins containing information on the foregoing subjects; farmers' cooperative organizations for insuring against loss by fire, for buying supplies, for selling products, etc.; production of the principal crops and the number of domestic animals in most of the countries of the world.		
Secretary's office:		
1 clerk, at \$1,000.....1,000.00		
97,040.00	96,640.00	104,580.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Statistics—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Collecting agricultural statistics, 1908, \$118,000.</i>		
Items of expenditure:	Items of expenditure:	Items of expenditure:
Salaries—	Salaries—	Salaries—
In Washington.....	In Washington.....	In Washington.....
Outside Washington.....	Outside Washington.....	Outside Washington.....
Traveling expenses.....	Traveling expenses.....	Traveling expenses.....
Stationery.....	Stationery.....	Stationery.....
Miscellaneous supplies and services, equipment, books, machinery, etc.....	Miscellaneous supplies and services, equipment, books, machinery, etc.....	Miscellaneous supplies and services, equipment, books, machinery, etc.....
Furniture.....	Furniture.....	Furniture.....
Freight.....	Freight.....	Freight.....
Express.....	Express.....	Express.....
Telegraph.....	Telegraph.....	Telegraph.....
Telephone.....	Telephone.....	Telephone.....
Total expenditures to September 30, 1908.....	Total amount of above appropriation (an increase over 1908 of \$7,000).....	Total amount estimated (an apparent increase over 1909 of \$11,200).....
Outstanding liabilities on September 30, 1908 (estimated).....		
Balance to be turned back into Treasury (estimated).....		
Total.....		
Less credit to appropriation.....		
Total amount of above appropriation.....		
NOTE.—While the apparent increase over the appropriation for 1908 is \$7,000, the actual increase is but \$2,100, owing to the inclusion in this appropriation of the amount previously allowed under the appropriation "Investigation of foreign markets."		
The above expenditures, classified in accordance with the suggestion of the Congressional Committee on Expenditures for this department, were for the following objects:		
Objects of expenditure:	Objects of expenditure:	Objects of expenditure:
Crop report.....	Crop report.....	Crop report.....
Administrative and executive.....	Administrative and executive.....	Administrative and executive.....
Bulletins, special investigations, etc.....	Bulletins, special investigations, etc.....	Bulletins, special investigations, etc.....
Cooperative work with Minnesota Experiment Station.....	Cooperative work with Minnesota Experiment Station.....	Cooperative work with Minnesota Experiment Station.....
Rural schools, statistics.....	Rural schools, statistics.....	Rural schools, statistics.....
Work for other bureaus.....		
Total.....	Total.....	Total.....
Items of expenditure, subdivided by objects:		
Salaries in Washington—	Salaries in Washington—	Salaries in Washington—
Crop report.....	Crop report.....	Crop report.....
Administrative and executive.....	Administrative and executive.....	Administrative and executive.....
Bulletins, special investigations, etc.....	Bulletins, special investigations, etc.....	Bulletins, special investigations, etc.....
Work for other bureaus.....		
Salaries outside Washington—	Salaries outside Washington—	Salaries outside Washington—
Crop report.....	Crop report.....	Crop report.....
Cooperative work with Minnesota Experiment Station.....	Cooperative work with Minnesota Experiment Station.....	Cooperative work with Minnesota Experiment Station.....
Rural schools, statistics.....		
Traveling expenses—	Traveling expenses—	Traveling expenses—
Crop report.....	Crop report.....	Crop report.....
Administrative and executive.....	Administrative and executive.....	Administrative and executive.....
Bulletins, special investigations, etc.....	Bulletins, special investigations, etc.....	Bulletins, special investigations, etc.....
Rural schools, statistics.....		
Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc.—	Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc.—	Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc.—
Crop report.....	Crop report.....	Crop report.....
Administrative and executive.....	Administrative and executive.....	Administrative and executive.....
Bulletins, special investigations, etc.....		
Freight, express, telegraph and telephone—	Freight, express, telegraph and telephone—	Freight, express, telegraph and telephone—
Crop report.....	Crop report.....	Crop report.....
Administrative and executive.....		
Total.....	Total.....	Total.....

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Statistics—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Collecting agricultural statistics, 1908, \$118,000—Continued.</i>	<i>Collecting agricultural statistics, 1909, \$125,000—Continued.</i>	<i>Collecting agricultural statistics, 1910, \$136,200—Continued.</i>
Objects of expense, subdivided by items:	Objects of expense, subdivided by items:	Objects of expense, subdivided by items:
Crop report—	Crop report—	Crop report—
Salaries—	Salaries—	Salaries—
In Washington.....	In Washington... \$4,100.00	In Washington... \$2,640.00
Outside Washington.....	Outside Washington.....	Outside Washington.....
Travel.....	60,529.16	64,550.00
Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc.....	28,934.17	38,210.00
Freight, express, telegraph, and telephone..		
	5,800.00	8,000.00
	600.00	800.00
	\$99,963.33	\$114,200.00
Administrative and executive—	Administrative and executive—	Administrative and executive—
Salaries in Washington.....	Salaries in Washington.....	Salaries in Washington.....
Travel.....	11,510.00	5,950.00
Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc.....	850.00	2,500.00
Freight, express, telegraph, and telephone..		
	500.00	1,000.00
	100.00	200.00
	12,960.00	9,650.00
Bulletins, special investigations, etc.—	Bulletins, special investigations, etc.—	Bulletins, special investigations, etc.—
Salaries in Washington.....	Salaries in Washington.....	Salaries in Washington.....
Travel.....	5,876.17	3,950.00
Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc.....	250.00	900.00
	600.00	2,000.00
	6,726.17	6,850.00
Cooperative work with Minnesota Experiment Station—	Cooperative work with Minnesota Experiment Station—	Cooperative work with Minnesota Experiment Station—
Salaries outside Washington.....	Salaries outside Washington.....	Salaries outside Washington.....
	2,420.00	2,500.00
	130.50	
	2,550.50	
Rural schools, statistics—	Rural schools, statistics—	Rural schools, statistics—
Salaries outside Washington.....	Salaries outside Washington.....	Salaries outside Washington.....
Travel.....	1,400.00	1,400.00
Work for other bureaus—	Travel.....	Travel.....
Salaries in Washington.....	1,400.00	1,600.00
	2,800.00	3,000.00
Total.....	Total.....	Total.....
	115,426.62	125,000.09
		136,200.00
<i>Investigation of foreign markets, 1908, \$4,900.</i>		
Items of expenditure:	Included in appropriation "Collecting Agricultural Statistics, 1909."	
Salaries in Washington.....		
Equipment.....		
Travel, station, and field expenses.....		
Total expenditures to September 30.....		
Outstanding liabilities on September 30 (estimated)....		
Balance to be turned back into Treasury (estimated)....		
Total amount of above appropriation.....		
The above expenditures, classified in accordance with the suggestion of the Congressional Committee on Expenditures in the Department of Agriculture, were for the following objects:		
Objects of expenditure:		
Administrative and executive—		
Salaries in Washington.....		
Crop report—		
Travel, station, and field expenses.....		
Bulletins—		
Salaries in Washington.....		
Equipment.....		
Yearbook and Statistical Appendix—		
Salaries in Washington.....		
Special investigations and inquiries—		
Salaries in Washington.....		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Statistics—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Collecting agricultural statistics, 1908, \$118,000—Continued.</i>	<i>Collecting agricultural statistics, 1909, \$125,000—Continued.</i>	<i>Collecting agricultural statistics, 1910, \$136,200—Continued.</i>
Crop Reporter— Salaries in Washington..... \$51. 69		
Library— Salaries in Washington..... 10. 52		
Work for other bureaus— Salaries in Washington..... 351. 69		
Total..... 4,705. 02		
Total of all appropriations for the Bureau of Statistics, 1908..... 219,940.00	Total of appropriations for the Bureau of Statistics.. \$221,640.00	Total estimates for appropriations for the Bureau of Statistics, 1910..... \$240,780.00
Unexpended balance to be turned back into the Treasury (estimated)..... 6,360. 03		
Total amount expended..... 213,579. 97		
The total expenditures of the bureau, as above set forth, were applied to the objects stated in detail below:	The appropriations for the Bureau of Statistics are being applied to the objects stated in detail below:	The estimates for the Bureau of Statistics are submitted for appropriation for the objects stated in detail below:
PROJECTS.	PROJECTS.	PROJECTS.
Bulletins: Publications of more or less magnitude, containing comprehensive information concerning special agricultural products or economic subjects pertaining to agriculture, such as the production and value of important crops through a long period of years, production and consumption, cost of production, expenses and methods of marketing, imports and exports, foreign production, etc. The range of subjects is as broad as the fundamental occupation to which they all relate. The bulletins upon which work was performed and the amount expended for each are as follows:	Bulletins: Unpublished bulletins, being prepared in 1908, are being carried forward toward completion and new ones have been started under the following titles: Cost of producing farm products in Minnesota. Consolidated schools. Chronology of United States agriculture. Farmers' cooperative societies and systems. Bulletins on crop dates throughout the world, showing times of seeding, harvest, etc.	Bulletins:
(40) Meat animals and packing-house products imported into 11 principal countries, 1895-1904, revised to 1906..... 932. 67		
(52 and 53) Imports and exports of farm and forest products, 1904-1906, by countries from or to which consigned... 1,672. 18		
(54) Trade with noncontiguous possessions in farm and forest products, 1904-1906..... 148. 33		
(55) Meat supply and surplus with consideration of consumption and exports..... 263. 99		
(60) Rye crops of the United States, 1866-1906..... 61. 08		
(61) Buckwheat crops of the United States, 1866-1906..... 55. 60		
(62) Potato crops of the United States, 1866-1906..... 69. 01		
(63) Hay crops of the United States, 1866-1906..... 22. 89		
(64) Number and farm value of farm animals in the United States, 1867-1907..... 199. 39		
(65) Russian wheat trade..... 57. 86		
(66) Russian wheat and flour in European markets..... 264. 46		
(67) Ocean freight rates and the conditions affecting them.. 456. 80		
(68) Cereal production of Europe..... 368. 66		
(69) European grain trade..... 173. 75		
Cost of producing farm products (unpublished)..... 669. 95		
Farm wages (unpublished)..... 114. 18		
Imports of farm products into the Netherlands (unpublished)..... 2,766. 41		
Imports of farm products for fifty years (unpublished) 694. 49		
Imports and exports of farm and forest products for fifty years (unpublished)..... 1,359. 92		
World's cotton (unpublished)..... 520. 15		
World's dairy products (unpublished)..... 150. 01		
World's wheat production (unpublished)..... 1,206. 15		
Total..... 12,227. 93	Total..... 13,500. 00	Total..... 15,000. 00
Crop report: Object: To collect information showing acreage, condition, and prospects during the growing season, and final yield, value, etc., of all the important farm products, and to compile, tabulate, and make public such data. Sources of information— Special field agents, who travel within prescribed territories, each embracing several contiguous States, preferably those having similar soils, climate, and products, and ascertain agricultural conditions by personal observation and by inquiry among leading producers, dealers, consumers, and others who by reason of business relations or other interests are well informed on the subjects reported upon. Salaries..... \$29,196. 07 Traveling expenses..... 25,357. 29 This class includes several men who devote their entire time and attention to certain special crops, as rice and tobacco. State statistical agents, who report each for a single State, deriving their information principally from a corps of correspondents, several in each county. They travel through their territory once or twice yearly to visit aids and select new ones and to ascertain the agricultural conditions by personal observation and inquiry. Salaries..... \$26,967. 21 Traveling expenses..... 4,808. 41	Crop report: Special field agents— Salaries..... \$34,000. 00 Traveling expenses..... 24,500. 00 58,500. 00 State statistical agents— Salaries..... \$26,529. 16 Traveling expenses..... 4,434. 17 30,963. 33	Crop report: Special field agents— Salaries..... \$37,000. 00 Traveling expenses..... 31,210. 00 68,210. 00 State statistical agents— Salaries..... \$27,550. 00 Traveling expenses..... 7,000. 00 34,550. 00
54,553. 36		
31,775. 62		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Statistics—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Collecting agricultural statistics, 1908, \$118,000—Continued.</i>	<i>Collecting agricultural statistics, 1909, \$125,000—Continued.</i>	<i>Collecting agricultural statistics, 1910, \$136,200—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
County correspondents, about 2,900, who report to the bureau from each county, basing their figures upon personal observation and inquiry and upon reports from assistants located throughout their respective counties. No material compensation for the services of these correspondents other than department publications and seeds. Township correspondents, about 30,000 in all, an average of about 10 to each county, who report to the bureau the conditions in their respective localities. No compensation, except by means of department publications, and seeds. All of the above-mentioned classes of correspondents report monthly, giving information appropriate to the season concerning the agricultural products within their respective limits. In addition to the above, regular lists of correspondents are the following: Individual representative farmers, who report once a year upon grain, in answer to questions concerning yield upon their individual farms, and twice yearly from the cotton States—in the spring to the question of acreage and in the fall to the question of yield upon their individual farms. Bankers, merchants, etc., reporting twice yearly to the question of acreage in the spring, and yield in the fall, of cotton. Ginners, in the cotton States only, reporting twice a year, to the question of acreage in the spring, and yield in the fall, of cotton. Mills and elevators, reporting once a year, to the question of yield per acre of grain. No compensation, except publications and seeds. Preparation: The data obtained are compiled and tabulated by the clerical force of the bureau. Salaries..... \$50,336.93 Publicity: The crop report is published monthly, as quickly as the data can be compiled and tabulated, being given to the public at a stated time through the medium of the telegraph companies and press associations, and as rapidly as possible thereafter through special newspaper correspondents, granges, agricultural journals, etc. It is also published in the bureau's monthly issue of the "Crop Reporter," 130,000 copies of which are mailed as soon as it can be printed after the crop report figures are available. Cost of publication borne by department's appropriation for publications. Pro rata cost of administrative and executive expenses... 21,299.97 Cost of supplies, including office fixtures, stationery, and supplies for special field and state agents, envelopes for correspondents' reports, pro rata proportion for stationery, miscellaneous supplies, and furniture used in bureau, etc..... 9,311.13 Freight, express, telegraph, and telephone charges..... 519.84 Total expenditures for Crop Report during the year 1908..... 167,796.85 Crop Reporter..... 970.12 An eight-page monthly publication containing full data, by States, of the crop situation in the United States, showing, in successive months, the acreage, condition, yield, and value of all important crops and, in February, the number and value of farm animals, with comparisons for preceding months and years. It contains each month a summary of the crop situation in the principal countries of the world, gathered from the official statements of foreign governments or, when these are not available, from such other sources as are generally recognized as reliable, reinforced by the personal investigations and observation of the bureau's special European agent. It is also a vehicle for the dissemination of special statistical data of interest to the agricultural community, as the farm prices of agricultural products and the prices of the same in various trade centers, stocks on hand, exports and imports, production and consumption, etc. The cost of publication is borne by the department's appropriation for that purpose. Cost of editing and preparation of special data..... 970.12 Inquiries, special..... 5,433.64 Requests are received daily from statesmen, executive departments and bureaus, state and foreign governments, educators, associations, etc., for statistical data not assembled in the form desired or not accessible to the writers. Compliance with such requests involves much research and the preparation of many letters, statements, and tables. This work is inevitably associated with the position of the bureau as the first authority in the United States on agricultural statistics.	Preparation— Salaries..... \$53,626.67 Pro rata cost of administrative and executive expenses..... 23,000.00 Cost of supplies, including office fixtures, stationery, and supplies for special field and state agents, envelopes for correspondents' reports, pro rata proportion of stationery, miscellaneous supplies, and furniture used in bureau, etc..... 5,800.00 Freight, express, telegraph, and telephone charges..... 600.00 Estimated expenditures for Crop Report during the year 1909..... 172,490.00 Crop Reporter..... 1,500.00 Inquiries, special..... 6,000.00	Preparation— Salaries..... \$54,000.00 Pro rata cost of administrative and executive expenses..... 24,000.00 Cost of supplies, including office fixtures, stationery, and supplies for special field and state agents, envelopes for correspondents' reports, pro rata proportion of stationery, miscellaneous supplies, and furniture used in bureau, etc..... 8,000.00 Freight, express, telegraph, and telephone charges..... 800.00 Expenditures estimated as necessary for Crop Report during the year 1910..... 191,560.00 Crop Reporter..... 1,500.00 Inquiries, special..... 6,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Bureau of Statistics—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Collecting agricultural statistics, 1908, \$118,000—Continued.</i>	<i>Collecting agricultural statistics, 1909, \$125,000—Continued.</i>	<i>Collecting agricultural statistics, 1910, \$136,200—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Investigations, special..... \$6,723.26	Investigations, special..... \$7,000.00	Investigations, special..... \$7,000.00
Investigations into a variety of statistical subjects related to the agricultural interests of the United States, some for the purposes of confirming or disapproving the value of existing or proposed methods of accumulating statistical data, or the conclusions drawn therefrom, and many eventuating into subject-matter for bureau publications, as circulars, bulletins, etc., are being carried on constantly.		
Library..... 5,061.16	Library..... 6,500.00	Library..... 6,500.00
The bureau's library of agricultural statistics is pre-eminent among similar collections in the United States and probably second to none in the world. Among the most important of its contents are— Annual official statistical reports on the agriculture of foreign governments; Annual statistical and other publications of the departments and bureaus of the United States Government; Annual reports of state boards, departments of agriculture, and state auditors; Annual reports of chambers of commerce and boards of trade; Reports of federal and state censuses; Files of leading trade journals; Files of daily, weekly, and monthly foreign and domestic periodicals, price lists, etc.	A thorough revision and extension of the card-index system is in progress, with the view of rendering still more accessible the wealth of statistical data contained in the library.	
Rural schools, statistics of..... 3,189.87	Rural schools, statistics of..... 3,000.00	Rural schools, statistics of..... 3,200.00
Investigation of consolidation of ungraded into graded schools and high schools in rural districts, and the extent of such consolidation in the United States; cost of consolidated schools as compared with district schools, and particularly the cost, advantages, and influence of free public transportation of pupils between their homes and such schools; methods of consolidating and financing rural school systems; and comparative educational facilities and school attendance in rural communities with district and with consolidated schools. Statistical investigation into the courses of study in rural district and consolidated schools, with particular reference to the teaching of agriculture and home economics.		
Yearbook and Statistical Appendix..... 5,146.66	Yearbook and Statistical Appendix..... 5,000.00	Yearbook and Statistical Appendix..... 5,000.00
Preparation for inclusion in the Yearbook of articles on matters related to the work of this bureau, and of the agricultural statistics contained in the annual statistical appendix to that publication, including statements of the production of the principal crops and live stock at home and abroad for a period of five years; and, for the United States, the acreage, yield, farm price, and farm value of same for a long series of years; and, by States, the acreage, production, and farm value, average yield, and farm value per acre, and farm price per unit of measure, each year for ten years; wholesale prices per unit of measure in the principal markets of the United States, monthly, for a period of five years; exports and imports of the principal crops; and similar data for farm animals, and for the products of each, as sugar, flour, wool, and hides; transportation rates by rail and water, etc.		
Work for other bureaus..... 4,371.80	Work for other bureaus..... 3,900.00	Work for other bureaus..... 4,270.00
The statistical data accumulated by other bureaus of the department in connection with their investigations are compiled in this bureau.		
Cost of producing farm products: Cooperative work with Minnesota State Experiment Station..... 2,658.68	Cost of producing farm products: Cooperative work with Minnesota Experiment Station..... 2,750.00	Cost of producing farm products: Cooperative work with Minnesota Experiment Station..... 2,750.00
This work has been carried on for several years and is producing fruitful results in showing the detailed cost of producing farm products under a variety of conditions as to soil, location, facilities and management, and for both diversified and specialized products.		
Grand total..... 213,579.97	Grand total..... 221,640.00	Grand total..... 240,780.00
Total of all appropriations for Bureau of Statistics. 219,940.00	Total of all appropriations for Bureau of Statistics (an increase over 1908 of \$1,700)..... 221,640.00	Total amount estimated for Bureau of Statistics (an increase over 1909 of \$19,140)..... 240,780.00
Total expenditures to September 30..... 211,120.38		
Outstanding liabilities on September 30 (estimated)..... \$2,461.24		
Less credit to appropriations..... 1.65		
2,459.59		
Balance to be turned back into Treasury (estimated)..... 6,360.03		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

LIBRARY.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Library, Department of Agriculture, 1908, \$15,880.</i>	<i>Salaries, Library, Department of Agriculture, 1909, \$18,080.</i>	<i>Salaries, Library, Department of Agriculture, 1910, \$20,160.</i>
Barnett, C. R. Librarian, at \$2,000. \$2,000.00 Hawks, E. B. Assistant Librarian, at \$1,400. 1,400.00 Knapp, Abbie R. Clerk, at \$1,200. 1,200.00 Thompson, H. M. Cataloguer, at \$1,200. 1,200.00 Ryne, Minnie L. Cataloguer, at \$1,000. 500.00 Thompson, M. F. Cataloguer, at \$1,000. 500.00 Sewall, M. L. Cataloguer, at \$1,000. 1,000.00 Upton, G. E. Cataloguer, at \$1,000. 863.90 Parker, Fanny L. Clerk, at \$900. 825.00 Upton, G. E. Clerk, at \$900. 70.00 Ryne, Minnie L. Clerk, at \$900. 342.50 Thompson, M. F. Clerk, at \$900. 450.00 Todd, F. W. Clerk, at \$900. 105.00 Sewall, Harriet W. Clerk, at \$900. 112.50 Smith, Florence P. Clerk, at \$900. 787.50 Upton, K. G. Clerk, at \$900. 845.00 Goss, Audrey. Clerk, at \$840. 105.00 Parker, Fanny L. Clerk, at \$840. 70.00 Sewall, Harriet W. Clerk, at \$840. 525.00 Warren, Mary W. Clerk, at \$720. 105.00 Crowther, Mary. Clerk, at \$720. 480.00 Sewall, Harriet W. Clerk, at \$720. 62.00 Smith, Paul J. Clerk, at \$720. 60.00 Warren, Mary W. Messenger, at \$720. 582.00 Smith, Moses. Messenger, at \$720. 720.00 Campbell, W. S. Messenger, at \$480. 206.67 Key, R. C. Messenger, at \$480. 222.66 Sheehan, Frank J. 50.67 Total. 15,380.40 Unexpended balance. 499.60 Total of above appropriation. 15,880.00	1 Librarian. \$2,000.00 1 Assistant Librarian. 1,400.00 1 clerk (who shall be a translator). 1,200.00 2 cataloguers, at \$1,200 each. 2,400.00 3 cataloguers, at \$1,000 each. 3,000.00 1 clerk. 1,000.00 4 clerks, at \$900 each. 3,600.00 1 clerk. 840.00 2 clerks, at \$720 each. 1,440.00 1 messenger. 720.00 1 messenger or laborer. 480.00 Total of above appropriation (an increase over 1908 of \$2,200). 18,080.00	1 Librarian. \$2,000.00 1 Assistant Librarian. 1,400.00 2 clerks, class one, 1 of whom shall be a translator (increase of 1 submitted). 2,400.00 2 cataloguers, at \$1,200 each. 2,400.00 3 cataloguers, at \$1,000 each. 3,000.00 2 clerks, at \$1,000 each (increase of 1 submitted). 2,000.00 4 clerks, at \$900 each. 3,600.00 1 clerk. 840.00 NOTE.—Two clerks, at \$720 each, dropped. 1 messenger (submitted). 840.00 1 messenger. 720.00 1 messenger or laborer. 480.00 1 charwoman (by transfer from lump fund). 480.00 Total amount estimated (an apparent increase over 1909 of \$2,080). 20,160.00 NOTE.—The apparent increase over 1909 is \$2,080, but not considering the places transferred from the lump fund, there is an actual increase of \$1,600.
The above force performed the following duties:	The above force are performing the following duties:	The above force will perform the following duties:
Administration: 1 Librarian. \$2,000.00 1 assistant librarian. 1,400.00 3,400.00 Correspondence, files, and accounts: 1 clerk. 1,000.00 1 clerk. 900.00 1 clerk. 720.00 2,620.00 Cataloguing, indexing, translating, loan-desk work, and care of periodicals: 1 cataloguer. \$1,200.00 1 clerk (translator). 1,200.00 2 cataloguers, at \$1,000. 2,000.00 4 clerks, at \$900. 3,600.00 1 clerk. 840.00 1 clerk. 720.00 9,560.00 Messengers: 1 messenger. 720.00 1 messenger. 480.00 1,200.00 NOTE.—Of the above, 1 clerk at \$900 was detailed from the Office of the Secretary. 900.00 15,880.00	Administration: 1 Librarian. \$2,000.00 1 assistant librarian. 1,400.00 3,400.00 Correspondence, files, and accounts: 1 clerk. \$1,000.00 2 clerks, at \$900. 1,800.00 2,800.00 Cataloguing, indexing, translating, loan-desk work, and care of periodicals: 2 cataloguers at \$1,200. \$2,400.00 1 clerk (translator). 1,200.00 3 cataloguers, at \$1,000. 3,000.00 3 clerks, at \$900. 2,700.00 1 clerk. 840.00 2 clerks at \$720. 1,440.00 11,580.00 Messengers: 1 messenger. 720.00 1 messenger. 480.00 1,200.00 NOTE.—Of the above, 1 clerk at \$900 is detailed from the Office of the Secretary. 900.00 18,080.00	Administration: 1 Librarian. \$2,000.00 1 assistant librarian. 1,400.00 3,400.00 Correspondence, files, and accounts: 1 clerk. \$1,000.00 2 clerks, at \$900. 1,800.00 2,800.00 Cataloguing, indexing, translating, loan-desk work, and care of periodicals: 2 cataloguers, at \$1,200. \$2,400.00 2 clerks, class 1 (1 of whom shall be a translator), at \$1,200. 2,400.00 3 cataloguers, at \$1,000. 3,000.00 1 clerk. 1,000.00 3 clerks, at \$900. 2,700.00 1 clerk. 840.00 12,340.00 Messengers and charwomen: 1 messenger. 840.00 1 messenger. 720.00 1 messenger. 480.00 1 charwoman. 480.00 2,520.00 NOTE.—Of the above, 1 clerk at \$900 will be detailed from the Office of the Secretary. 900.00 20,160.00
<i>Library, Department of Agriculture, 1908, \$12,500.</i>	<i>Library, Department of Agriculture, 1909, \$15,500.</i>	<i>Library, Department of Agriculture, 1910, \$16,500.</i>
Books. \$5,346.27 Subscriptions to periodicals. 2,651.51 Subscriptions to serials and works published in parts. 1,268.62 Subscriptions to printed index cards. 141.45 Miscellaneous supplies. 264.85 Furniture and fittings. 407.15 Shelving. 2,080.70 Traveling expenses. 53.25 Labor in care of periodicals (temporary). 102.00 Total. 12,315.80 Outstanding liabilities on September 30, 1908 (estimated). 180.00 Balance to be turned back in Treasury. 4.20 Total of appropriation. 12,500.00 Total of all appropriations for Library. 28,380.00 Total expenditures to September 30, 1908. 27,696.20 Outstanding liabilities on September 30, 1908 (estimated). 180.00 Balance to be turned back in Treasury. 503.80 28,380.00	Books. \$9,500.00 Subscriptions to periodicals. 3,000.00 Subscriptions to serials and works published in parts. 1,500.00 Subscriptions to printed index cards. 180.00 Miscellaneous supplies. 200.00 Furniture and fittings. 360.00 Traveling expenses. 100.00 One charwoman. 460.00 One messenger. 200.00 Total of appropriation (an increase over 1908 of \$3,000). 15,500.00 Total of all appropriations for Library (an increase over 1908 of \$5,200). 33,580.00	Books. \$11,000.00 Subscriptions to periodicals. 3,000.00 Subscriptions to serials and works published in parts. 1,500.00 Subscriptions to printed index cards. 300.00 Miscellaneous supplies. 200.00 Furniture and fittings. 400.00 Traveling expenses. 100.00 Total amount estimated (an apparent increase over 1909 of \$1,000). 16,500.00 NOTE.—Apparent increase \$1,000, but adding the saving in salary of place transferred to the statutory roll, amounting to \$480, the actual increase is \$1,480. Total amount estimated for Library (an increase over 1909 of \$3,080). 36,660.00
REMARKS.—The Library appropriation for 1908 was spent in the purchase of agricultural, scientific, and technical books and periodicals, and	REMARKS.—The Library appropriation for 1909 is being spent in the purchase of agricul-	REMARKS.—The Library appropriation for 1910 will be spent in the purchase of agricul-

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Library—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Library, Department of Agriculture, 1908, \$13,500—Continued.</i>	<i>Library, Department of Agriculture, 1909, \$15,500—Continued.</i>	<i>Library, Department of Agriculture, 1910, \$16,500—Continued.</i>
reference works, needed in connection with the work of the department, and in the purchase of library shelving. In addition a small part was spent in the purchase of library fixtures; miscellaneous library supplies, such as card cabinets, filing cases, and catalogue cards, and for traveling expenses.	tural, scientific, and technical books and periodicals, reference books and bibliographical material, needed in connection with the work of the department. In addition a small part is being spent for library supplies, furniture, and fittings.	tural, scientific, and technical books and periodicals, reference books and bibliographical material, needed in connection with the work of the department. In addition a small part will be spent for library supplies, furniture, and fittings, and traveling expenses. The above increase is recommended that the Library may keep pace with the growth of the department and more adequately meet the increasing demands that are made upon it.

OFFICE OF THE CHIEF CLERK.

<i>Contingent expenses, Department of Agriculture, 1908, \$47,000.</i>	<i>Contingent expenses, Department of Agriculture, 1909, \$36,200.</i>	<i>Contingent expenses, Department of Agriculture, 1910, \$70,000.</i>
Salaries of laborers, etc., in Washington in connection with moving into the new buildings..... \$4,404.25	Salary of dispatch agent in New York..... \$400.00	Salary of dispatch agent in New York..... \$600.00
Salary of dispatch agent in New York..... 400.00	Stationery..... 7,000.00	Stationery..... 10,000.00
Stationery..... 9,989.25	Miscellaneous supplies and services, equipment, books, machinery, etc..... 13,800.00	Miscellaneous supplies and services, equipment, books, machinery, etc..... 18,000.00
Miscellaneous supplies and services, equipment, books, machinery, etc..... 18,941.25	Furniture..... 2,000.00	Furniture..... 3,770.00
Furniture..... 2,043.82	Fuel..... 16,000.00	Fuel..... 14,000.00
Fuel..... 9,765.20	Freight..... 50.00	Freight..... 50.00
Freight..... 1,145.69	Express..... 250.00	Express..... 180.00
Express..... 172.96	Telegraph..... 100.00	Telegraph..... 250.00
Telegraph..... 136.11	Telephone..... 600.00	Telephone..... 750.00
Telephone..... 457.73	Gas and electricity..... 12,000.00	Gas and electricity..... 10,900.00
Gas and electricity..... 2,554.68	Traveling expenses..... 1,000.00	Traveling expenses..... 1,500.00
Traveling expenses..... 2,146.32	Rent of buildings..... 8,000.00	Rent of buildings..... 10,000.00
	Erection of shop building..... 25,000.00	
Total expenditures to September 30, 1908..... 52,157.26		
Outstanding liabilities on September 30, 1908 (estimated)..... 400.00		
Balance to be turned back in Treasury (estimated)..... 498.30		
Total amount available..... 53,055.56		
Deduct amount of repayments to credit of appropriation made through Treasury Department on account of supplies furnished to the different bureaus by chief of the Supply Division, the supplies having been originally purchased out of above-named appropriation..... 6,055.56		
Total amount of regular appropriation..... 47,000.00	Total amount of appropriation (an increase over 1908 of \$39,200)..... \$6,200.00	Total amount estimated (an apparent decrease from 1909 of \$16,200)..... 70,000.00

REMARKS.—All supplies for the use of the office of the Secretary, the Assistant Secretary, the Chief Clerk, the file room, the Supply Division, the Chief Engineer, as well as all offices not coming directly under an independent division or bureau, are paid from above appropriation. All gas and electric current used in the old and new buildings, as well as in the adjacent brick building occupied by the Bureau of Entomology and Bureau of Biological Survey, are also paid for out of this appropriation. Other expenses, not specifically named above, for the fiscal year 1908 include postage, \$2,500; ice, \$1,329.29; forage, \$1,646.50; washing towels, \$272.14; also charges for rental of fire-alarm boxes, advertisements in connection with annual contracts for supplies, repairs to buildings, etc.

REMARKS.—The principal items of increase are \$25,000 for the erection of a building for the mechanical shops, storage, and stable; \$8,000 for rent of necessary buildings in the District of Columbia, so as to place rental of such quarters under the Secretary's office, and the amounts for additional fuel, electric light, and gas required for the new buildings.

NOTE.—Apparent decrease, \$16,200, but omitting the provision of \$25,000, for the erection of a shop building, the actual increase is \$8,800.

REMARKS.—The above amount is absolutely necessary to meet the increased demands against this fund due to the growth of the department, the increased cost of supplies, and the fact that several more buildings which have been added to the group of buildings owned by the Government will require repairs from time to time.

OFFICE OF EXPERIMENT STATIONS.

<i>Salaries, Office of Experiment Stations, 1908, \$31,220.</i>	<i>Salaries, Office of Experiment Stations, 1909, \$34,620.</i>	<i>Salaries, Office of Experiment Stations, 1910, \$39,480.</i>
True, A. C..... Director, at \$3,500..... \$3,500.00	1 director..... \$3,500.00	1 director..... \$3,500.00
Johnston, C. E..... Chief clerk, at \$1,800..... 1,800.00	1 chief clerk..... 1,800.00	1 chief clerk..... 1,800.00
Henry, William..... Clerk and proof reader, at \$1,600..... 1,600.00	1 clerk and proof reader..... 1,600.00	1 clerk and proof reader..... 1,600.00
Bartholow, F. A..... Clerk, class two..... 1,400.00	5 clerks, class two..... 7,000.00	5 clerks, class two..... 7,000.00
Harlow, G. A..... Clerk, class two..... 1,400.00	4 clerks, class one..... 4,800.00	5 clerks, class one (increase of 1 by transfer from lump fund for general expenses)..... 6,000.00
Sommers, S. L..... Clerk, class two..... 1,400.00	5 clerks, at \$1,000 each..... 5,000.00	5 clerks, at \$1,000 each..... 5,000.00
Spethmann, M. T..... Clerk, class two..... 1,400.00	2 clerks, at \$900 each..... 1,800.00	3 clerks, at \$900 each (increase of 1 submitted)..... 2,700.00
Murphy, Daisy K..... Clerk, class one..... 366.67	4 clerks, at \$840 each..... 3,360.00	5 clerks, at \$840 each (increase of 1 by transfer from lump fund for irrigation)..... 4,200.00
Rowley, B. M..... Clerk, class one..... 830.00	1 clerk or messenger..... 840.00	1 clerk or messenger..... 840.00
Nau, K. A..... Clerk, class one..... 1,200.00	1 messenger or caretaker..... 720.00	2 messengers or caretakers, at \$720 each (increase of 1 by transfer from lump fund for irrigation)..... 1,440.00
Ryder, M. E..... Clerk, class one..... 1,200.00	1 messenger..... 600.00	3 clerks or messengers, at \$600 each (1 in lieu of 1 messenger, at \$600, dropped, and 2 by transfer from lump funds for nutrition and irrigation)..... 1,800.00
Sweetnam, M. V..... Clerk, class one..... 1,200.00	1 messenger or laborer..... 480.00	
Agnew, M. A..... Clerk, at \$1,000..... 1,000.00	2 messengers, at \$480 each..... 960.00	
Daish, W. M..... Clerk, at \$1,000..... 691.67	1 copyist or laborer..... 720.00	
Rowley, B. M..... Clerk, at \$1,000..... 308.33	3 laborers or charwomen, at \$480 each..... 1,440.00	
Vance, Miriam C..... Clerk, at \$1,000..... 1,000.00		
Daish, W. M..... Clerk, at \$900..... 277.50	Total of above appropriation (increase over 1908 of \$3,400)..... 34,620.00	
Resch, Antoinette..... Clerk, at \$900..... 622.50		
Garland, M. O..... Clerk, at \$900..... 207.50		
Walton, Lutie L..... Clerk, at \$840..... 692.50		
Armstrong, Jessie V..... Clerk, at \$840..... 193.67		
Garland, M. O..... Clerk, at \$840..... 646.33		
Colbath, M. F..... Clerk, at \$840..... 840.00		
Crain, A. C..... Clerk, at \$840..... 840.00		
Emerson, Edith O..... Clerk, at \$840..... 840.00		

NOTE.—One messenger, at \$600, dropped (included in clerks or messengers, at \$600).

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Office of Experiment Stations, 1908, \$31,220—Continued.</i>		
Resch, Antoinette.....} Clerk, at \$840.....{ \$259.00	<i>Salaries, Office of Experiment Stations, 1909, \$34,620—Continued.</i>	
Tallent, G. A.....} 581.00	1 messenger or laborer..... \$480.00	
Eidsness, Lars M.....} Messenger, at \$720.....{ 720.00	NOTE.—Two messengers, at \$480 each, dropped.	
Nelson, Henry A.....} 431.67	1 copyist or laborer..... 720.00	
Woods, L. A.....} Messenger, at \$600.....{ 166.67	4 laborers or charwomen, at \$480 each (increase of 1 by transfer from lump fund for irrigation)..... 1,920.00	
Hoffman, Geo. L.....} 337.33	2 laborers or charwomen, at \$240 each (by transfer from lump fund for irrigation)..... 480.00	
Nelson, Henry A.....} Messenger, at \$480.....{ 134.67	Total amount estimated (an apparent increase over 1909 of \$4,860)..... 39,480.00	
Brown, Ralph W.....} 80.00	NOTE.—The apparent increase is \$4,860, but not considering the places transferred from the lump funds, the actual decrease is \$60.	
Mansuy, John S.....} Messenger, at \$480.....{ 400.00	The above force will perform the following duties:	
Lehmann, W. G.....} 480.00	General administration of the office in its relations with agricultural experiment stations, agricultural colleges and schools, farmers' institutes, and investigations on nutrition, irrigation, and drainage; general and cost accounting and care of office rooms:	
Webster, Nimia.....} Copyist, at \$720.....{ 720.00	Director..... \$3,500.00	
Garvey, Mary C.....} Laborer, at \$480.....{ 480.00	Chief clerk..... 1,800.00	
Moriarity, Mary A.....} Laborer, at \$480.....{ 480.00	1 clerk, class two..... 1,400.00	
Noone, Sarah A.....} Laborer, at \$480.....{ 480.00	1 clerk..... 1,000.00	
Total..... 31,207.01	2 clerks, \$900 each..... 1,800.00	
Unexpended balance..... 12.99	2 clerks, \$840 each..... 1,680.00	
Total of above appropriation..... 31,220.00	1 messenger..... 720.00	
The above force performed the following duties:		
General administration of the office in its relations with agricultural experiment stations, agricultural colleges and schools, farmers' institutes, investigations on irrigation and drainage, general and cost accounting and care of office rooms:		
Director..... \$3,500.00	Director..... \$3,500.00	
Chief clerk..... 1,800.00	Chief clerk..... 1,800.00	
1 clerk, class one..... 1,200.00	1 clerk, class two..... 1,400.00	
1 clerk..... 1,000.00	1 clerk..... 1,000.00	
1 messenger..... 720.00	2 clerks, \$900 each..... 1,800.00	
1 messenger..... 480.00	2 clerks, \$840 each..... 1,680.00	
3 laborers, at \$480 each..... 1,440.00	1 messenger..... 720.00	
10,140.00	1 messenger..... 600.00	
Preparation of experiment station record, annual report to Congress, bulletins, circulars, etc.:		
Clerk and proof reader..... \$1,600.00	Director..... \$3,500.00	
2 clerks, class two..... 2,800.00	Chief clerk..... 1,800.00	
3 clerks, class one..... 3,600.00	1 clerk, class two..... 1,400.00	
2 clerks, \$1,000 each..... 2,000.00	1 clerk..... 1,000.00	
2 messengers, \$480 each..... 960.00	2 clerks, \$900 each..... 1,800.00	
10,960.00	2 clerks, \$840 each..... 1,680.00	
Correspondence, files, distribution of publications, card index of station publications, care of property, movement of field instruments, and miscellaneous clerical work, including assignment and care of civil-service papers sent to the department for marking:		
2 clerks, class two..... \$2,800.00	1 messenger..... 720.00	
2 clerks, \$900 each..... 1,800.00	1 messenger..... 600.00	
5 clerks, \$840 each..... 4,200.00	4 laborers, \$480 each..... 1,920.00	
1 copyist..... 720.00	2 laborers, \$240 each..... 480.00	
1 messenger..... 600.00	14,900.00	
10,120.00	Preparation of experiment station record, annual report to Congress, bulletins, circulars, etc.:	
31,220.00	Clerk and proof reader..... \$1,600.00	
<i>Agricultural experiment stations, 1908, \$107,000.</i>		
General expenses (\$30,000):		
Salaries:	Salaries:	
In Washington..... \$23,559.01	In Washington..... \$23,500.00	
Out of Washington..... 450.00	Out of Washington..... 500.00	
Stationery..... 352.22	Stationery..... 350.00	
Miscellaneous supplies and services, equipment, books, machinery, etc..... 753.36	Miscellaneous supplies and services, equipment, books, machinery, etc..... 1,250.00	
Furniture..... 672.63	Furniture..... 500.00	
Freight..... 1.43	Freight..... 5.00	
Express..... 8.45	Express..... 10.00	
Telegraph..... 20.52	Telegraph..... 25.00	
Telephone..... 13.32	Telephone..... 10.00	
Rent..... 749.97	Apparatus, instruments, and laboratory material..... 25.00	
Apparatus, instruments, and laboratory material..... 15.90	Travel and station and field expenses..... 3,825.00	
Travel and station and field expenses..... 2,798.59	Total amount for general expenses (no increase over 1908)..... 30,000.00	
Total expenditures to September 30, 1908..... 29,395.40	<i>Agricultural experiment stations, 1909, \$123,000.</i>	
General expenses (\$34,800):		
Salaries:		
In Washington..... \$27,500.00		
Out of Washington..... 500.00		
Stationery..... 400.00		
Miscellaneous supplies and services, equipment, books, machinery, etc..... 1,750.00		
Furniture..... 500.00		
Freight..... 10.00		
Express..... 25.00		
Telegraph..... 25.00		
Telephone..... 15.00		
Apparatus, instruments, and laboratory material..... 75.00		
Travel and station and field expenses..... 4,000.00		
Total amount for general expenses (an apparent increase of \$4,800)..... 34,800.00		
NOTE.—Apparent increase, \$4,800, but adding the net saving		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Agricultural experiment stations, 1908, \$107,000—Continued.</i>	<i>Agricultural experiment stations, 1909. \$123,000—Continued.</i>	<i>Agricultural experiment stations, 1910, \$143,800—Continued.</i>
Outstanding liabilities on September 30, 1908 (estimated) \$308.01 Balance to be turned back in Treasury (estimated)..... 296.59 30,000.00		in salaries of places transferred to the statutory roll, amounting to \$1,200, the actual increase is \$6,000.
NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, were necessary to carry out the provisions of section 3 of the act of March 2, 1887, and sections 2, 4, and 5 of an act approved March 16, 1906, and covered the following work: Supervision of the work and expenditures of 55 agricultural experiment stations in 48 States and Territories, and Alaska, Hawaii, and Porto Rico, and promotion of their general interests. The preparation of 68 publications based on the work of over 1,000 agricultural experiment stations and kindred institutions throughout the world, and 900 cards of the index of experiment station literature. Preparation of 4,650 summaries of the reports of agricultural investigations made by the agricultural experiment stations and kindred institutions in the United States and over 50 other countries, in order to give prompt information regarding such investigations to the workers in similar lines in this department and the agricultural experiment stations and to teachers and students in the agricultural colleges and schools. This information is published monthly in the Experiment Station Record. This journal also contains articles suggesting lines of work for the stations and advice regarding their work and management as required.	NOTE.—The above estimated expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, are necessary to carry out the provisions of section 3 of the act of March 2, 1887, and sections 2, 4, and 5 of an act approved March 16, 1906, and will include the following work: Supervision of the work and expenditures of 55 agricultural experiment stations in 48 States and Territories, and Alaska, Hawaii, Porto Rico, and Guam, and promotion of their general interests. The preparation of publications based on the work of over 1,000 agricultural experiment stations and kindred institutions throughout the world, and cards of the index of experiment station literature. Preparation of summaries of the reports of agricultural investigations made by the agricultural experiment stations and kindred institutions in the United States and other countries, in order to give prompt information regarding such investigations to the workers in similar lines in this department and the agricultural experiment stations and to teachers and students in the agricultural colleges and schools. This information is published monthly in the Experiment Station Record. This journal will also contain articles suggesting lines of work for the stations and advice regarding their work and management as required.	
Alaska Experiment Station (\$24,000): Maintenance of a central experiment station and four branch stations to investigate the agricultural and horticultural resources of Alaska, development of animal industry, dairying, etc., introduction of live stock for experimental purposes. Salaries..... 11,301.92 Labor..... 4,291.73 Travel..... 1,536.26 Freight, express, etc..... 2,315.52 Supplies, etc..... 4,548.66 Total..... 23,994.09 Balance, September 30, 1908..... 5.91 24,000.00	Alaska Experiment Station (\$26,000): Maintenance of a central experiment station and four branch stations to investigate the agricultural and horticultural resources of Alaska, development of animal industry, dairying, etc., introduction of live stock for experimental purposes. Salaries..... \$13,000.00 Labor..... 5,000.00 Travel..... 1,500.00 Freight, express, etc..... 2,000.00 Supplies, etc..... 4,500.00 Total..... 26,000.00	Alaska Experiment Station (\$28,000): Maintenance of a central experiment station and four branch stations to investigate the agricultural and horticultural resources of Alaska, development of animal industry, dairying, etc., introduction of live stock for experimental purposes. Salaries..... \$14,000.00 Labor..... 5,500.00 Travel..... 1,500.00 Freight, express, etc..... 2,000.00 Supplies, etc..... 5,000.00 Total..... 28,000.00
Hawaii Experiment Station (\$24,000): Maintenance of an experiment station at which studies are made on diversified agriculture with reference to the peculiar needs of the country, and scientific investigations in agronomy, chemistry, entomology, horticulture, etc. Salaries..... 11,412.69 Labor..... 5,183.02 Travel..... 1,101.56 Freight, express, etc..... 413.77 Supplies, etc..... 5,749.43 Total..... 23,860.47 Balance, September 30, 1908..... 139.53 24,000.00	Hawaii Experiment Station (\$26,000): Maintenance of an experiment station at which studies are made on diversified agriculture with reference to the peculiar needs of the country, and scientific investigations in agronomy, chemistry, entomology, horticulture, etc. Salaries..... 18,000.00 Labor..... 4,000.00 Travel..... 750.00 Freight, express, etc..... 400.00 Supplies, etc..... 2,850.00 Total..... 26,000.00	Hawaii Experiment Station (\$28,000): Maintenance of an experiment station at which studies are made on diversified agriculture with reference to the peculiar needs of the country, and scientific investigations in agronomy, chemistry, entomology, horticulture, etc. Salaries..... 18,000.00 Labor..... 5,000.00 Travel..... 750.00 Freight, express, etc..... 500.00 Supplies, etc..... 3,750.00 Total..... 28,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Agricultural experiment stations, 1908, \$107,000—Continued.</i>		
Porto Rico Experiment Station (\$24,000): Maintenance of a station to carry on experiments in agronomy, entomology, horticulture, coffee culture, and scientific investigations along various lines of agriculture.	<i>Agricultural experiment stations, 1909, \$123,000—Continued.</i> Porto Rico Experiment Station (\$26,000): Maintenance of a station to carry on experiments in agronomy, entomology, horticulture, coffee culture, and scientific investigations along various lines of agriculture.	<i>Agricultural experiment stations, 1910, \$143,000—Continued.</i> Porto Rico Experiment Station (\$28,000): Maintenance of a station to carry on experiments in agronomy, entomology, horticulture, coffee culture, and scientific investigations along various lines of agriculture.
Salaries..... \$3,259.45	Salaries..... \$12,000.00	Salaries..... \$14,000.00
Labor..... 6,678.63	Labor..... 5,500.00	Labor..... 6,000.00
Travel..... 1,365.69	Travel..... 1,000.00	Travel..... 1,000.00
Freight, express, etc..... 298.72	Freight, express, etc..... 500.00	Freight, express, etc..... 500.00
Supplies, etc..... 7,397.51	Supplies, etc..... 7,000.00	Supplies, etc..... 6,500.00
Total..... 24,000.00	Total..... 26,000.00	Total..... 28,000.00
	Guam experiment station (\$5,000): To investigate and report to Congress on the agricultural resources and capabilities of Guam with special reference to the location of an agricultural experiment station and the determination of the character and extent of agricultural experiments immediately demanded by the agriculture of the island.	Guam experiment station (\$15,000): Equipment and maintenance of a station to carry on experiments in agronomy, horticulture, animal husbandry, etc.
	Salaries..... 1,320.00	Salaries..... 5,000.00
	Labor..... 1,000.00	Labor..... 2,000.00
	Travel..... 500.00	Travel..... 500.00
	Freight, express, etc..... 150.00	Freight, express, etc..... 500.00
	Supplies, implements, machinery, etc..... 2,030.00	Supplies, implements, etc..... 7,000.00
	Total..... 5,000.00	Total..... 15,000.00
Farmers' Institutes (\$5,000):	Farmers' institutes (\$10,000):	Farmers' institutes (\$10,000):
Salaries:	Salaries:	Salaries:
In Washington..... 3,262.50	In Washington..... 6,500.00	In Washington..... 7,850.00
Out of Washington..... 25.00	Stationery..... 100.00	Stationery..... 100.00
Stationery..... 18.87	Miscellaneous supplies and services, equipment, books, machinery, etc..... 1,500.00	Miscellaneous supplies and services, equipment, books, machinery, etc..... 300.00
Miscellaneous supplies and services, equipment, books, machinery, etc..... 210.39	Furniture..... 400.00	Furniture..... 150.00
Furniture..... 258.59	Express..... 10.00	Express..... 10.00
Express..... 1.95	Telegraph..... 10.00	Telegraph..... 10.00
Telegraph..... .97	Apparatus, instruments, and laboratory material..... 180.00	Apparatus, instruments, and laboratory material..... 80.00
Apparatus, instruments, and laboratory material..... 156.24	Travel and station and field expenses..... 1,300.00	Travel and station and field expenses..... 1,500.00
Travel and station and field expenses..... 970.26	Total..... 10,000.00	Total..... 10,000.00
Total expenditures to Sept. 30, 1908..... 4,904.77	Total amount of above appropriation..... 123,000.00	Total amount estimated..... 143,800.00
Outstanding liabilities on Sept. 30, 1908 (estimated)..... 26.70		
Balance to be turned back in Treasury (estimated)..... 68.53		
5,000.00		
Total amount of above appropriation..... 107,000.00		
NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, were necessary to carry out the provisions of an act making appropriations for the Department of Agriculture for the fiscal year 1908, the work including investigations and reports upon the organization and progress of farmers' institutes and agricultural schools in the several States and Territories and similar organizations in foreign countries, together with suggestions of plans and methods for making such organizations more effective for the dissemination of the results of the work of the Department of Agriculture and the agricultural experiment stations and of improved methods of agricultural practice.		
Nutrition investigations, 1908 (\$5,000):	Nutrition investigations, 1909 (\$7,000):	Nutrition investigations, 1910 (\$10,000):
Salaries (out of Washington)..... 581.66	Salaries (in Washington)..... 4,500.00	Salaries (in Washington)..... 6,500.00
Miscellaneous supplies and services, equipment, books, machinery, etc..... 346.09	Miscellaneous supplies and services, furniture, equipment, books, machinery, etc..... 775.00	Miscellaneous supplies and services, furniture, equipment, books, machinery, etc..... 1,500.00
Freight..... 414.09	Freight..... 5.00	Freight..... 15.00
Express..... 7.38	Express..... 15.00	Express..... 30.00
Telegraph..... 1.37	Telegraph..... 5.00	Telegraph..... 5.00
Travel and station and field expenses..... 275.41	Apparatus, instruments, and laboratory material..... 1,500.00	Apparatus, instruments, and laboratory material..... 1,450.00
Total expenditures to September 30, 1908..... 1,626.00	Travel and station and field expenses..... 200.00	Travel and station and field expenses..... 500.00
Outstanding liabilities on September 30, 1908 (estimated)..... 132.98	Total amount of above appropriation..... 7,000.00	Total amount estimated..... 10,000.00
Balance to be turned back in Treasury (estimated)..... 3,241.02		
5,000.00		
Total amount of above appropriation..... 5,000.00		
NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Agricultural experiment stations, 1908, \$107,000—Continued.</i>	<i>Agricultural experiment stations, 1909, \$128,000—Continued.</i>	<i>Agricultural experiment stations, 1910, \$143,800—Continued.</i>
on expenditures for this department, were necessary to carry out the provisions of an act making appropriations for the Department of Agriculture for the fiscal year 1908, which provided that all apparatus then the property of the Government and used in nutrition investigations be prepared for shipment and transported to and stored in Washington, D. C.	ance with the suggestion of the congressional committee on expenditures for this department, are estimated as being necessary to carry out the provisions of an act making appropriations for the Department of Agriculture for the fiscal year 1909, which provides for setting up and completing apparatus the property of the Government and used in the nutrition investigations and the preparation for publication of the results already obtained.	ance with the suggestion of the congressional committee on expenditures have been submitted as necessary to enable the Secretary of Agriculture to investigate and report on the nutritive value of agricultural products used for human food, with special suggestions of plans and methods for the more effective utilization of such products and the dissemination of useful information on this subject, including employment of assistants, clerks, and other persons in the city of Washington or elsewhere, and such other expenses as may be necessary in the conduct of these investigations.
<i>Irrigation and drainage investigations, 1908, \$150,000.</i>	<i>Irrigation and drainage investigations, 1909, \$150,000.</i>	<i>Irrigation and drainage investigations, 1910, \$156,880.</i>
Salaries:	Salaries:	Salaries:
In Washington..... \$24,361.28	In Washington..... \$24,500.00	In Washington..... \$26,100.00
Out of Washington..... 60,445.09	Out of Washington..... 63,500.00	Out of Washington..... 67,100.00
Stationery..... 1,238.33	Stationery..... 1,200.00	Stationery..... 1,200.00
Miscellaneous supplies and services, equipment, books, machinery, etc..... 16,900.25	Miscellaneous supplies and services, equipment, books, machinery, etc..... 15,000.00	Miscellaneous supplies and services, equipment, books, machinery, etc..... 15,000.00
Furniture..... 2,311.99	Furniture..... 2,000.00	Furniture..... 2,000.00
Freight..... 100.97	Freight..... 150.00	Freight..... 150.00
Express..... 306.07	Express..... 350.00	Express..... 350.00
Telegraph..... 135.31	Telegraph..... 150.00	Telegraph..... 150.00
Telephone..... 32.68	Telephone..... 50.00	Telephone..... 50.00
Rent..... 764.00	Rent..... 994.00	Rent..... 994.00
Apparatus, instruments, and laboratory material..... 2,917.35	Apparatus, instruments, and laboratory material..... 2,106.00	Apparatus, instruments, and laboratory material..... 2,000.00
Travel and station and field expenses..... 36,936.83	Travel and station and field expenses..... 40,000.00	Travel and station and field expenses..... 41,786.00
Total expenditures to September 30, 1908..... 146,510.15		
Total amount of above appropriation..... 150,000.00	Total amount of above appropriation (no increase over 1908)..... 150,000.00	Total amount estimated (an apparent increase over 1909 of \$6,880)..... 156,880.00
Total expenditures under above groups..... 146,510.15		
Unexpended balance..... 3,489.85		
Repayments to credit of appropriation..... 10.72		
Net unexpended balance..... 3,500.57		
Outstanding liabilities on September 30, 1908 (estimated)..... 2,888.83		
Balance to be turned back in Treasury (estimated)..... 611.74		
Total amount of above appropriation..... 150,000.00		
NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, were necessary to carry out the provisions of an act making appropriations for the Department of Agriculture for the fiscal year 1908, enabling the Secretary of Agriculture to investigate and report upon the laws effecting irrigation, etc., the expenditures by States for this work being as follows:	NOTE.—The above proposed expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, will be necessary to carry out the provisions of an act making appropriations for the Department of Agriculture for the fiscal year 1909, enabling the Secretary of Agriculture to investigate and report upon the laws effecting irrigation, etc., the proposed expenditures by States for this work being as follows:	NOTE.—The above estimates, classified in accordance with the suggestion of the congressional committee on expenditures for this department, have been submitted as necessary to enable the Secretary of Agriculture to complete and report upon investigations now in progress and for the continuation and extension of the work to different localities. The proposed expenditure by States for this work is as follows:
Atlantic States (in general)..... 394.04	Alabama..... 1,000.00	Arizona..... 2,000.00
Arkansas..... 4,827.33	Atlantic States (in general)..... 415.00	Arkansas..... 6,000.00
Arid States (in general)..... 6,657.71	Arizona..... 1,500.00	Atlantic coast States (in general)..... 2,000.00
California..... 10,575.74	Arkansas..... 11,931.13	California..... 8,500.00
Colorado..... 8,344.49	Arid States (in general)..... 6,050.00	Colorado..... 6,800.00
Florida..... 4,744.03	California..... 7,750.00	Delaware and Maryland..... 2,000.00
Idaho..... 2,131.48	Colorado..... 7,300.00	Eastern States (in general)..... 3,000.00
Illinois..... 6,082.15	Delaware and Maryland..... 1,350.00	Florida..... 2,000.00
Indiana..... 183.77	Eastern States (in general)..... 2,500.00	Georgia..... 2,000.00
Iowa..... 225.00	Florida..... 2,000.00	Idaho..... 3,000.00
Kansas..... 1,833.41	Georgia..... 400.00	Illinois..... 1,000.00
Louisiana..... 3,621.74	Idaho..... 2,000.00	Indiana..... 1,000.00
Minnesota..... 1,708.69	Illinois..... 3,570.00	Iowa..... 300.00
Mississippi..... 9,849.96	Indiana..... 100.00	Kansas..... 3,500.00
Montana..... 801.01	Iowa..... 300.00	Louisiana..... 3,000.00
Nevada..... 2,269.30	Kansas..... 2,200.00	Minnesota..... 1,300.00
New Jersey..... 1,609.63	Louisiana..... 1,450.00	Mississippi..... 3,000.00
New Mexico..... 1,038.42	Minnesota..... 350.00	Montana..... 250.00
North Carolina..... 2,620.76	Mississippi..... 665.92	Nebraska..... 4,000.00
North Dakota..... 359.75	Montana..... 2,000.00	Nevada..... 1,000.00
Oregon..... 6,816.95	Nebraska..... 4,800.00	Mexico..... 1,500.00
South Carolina..... 4,217.19	Nevada..... 1,000.00	North Carolina..... 4,000.00
South Dakota..... 680.26	New Mexico..... 1,600.00	North Dakota..... 600.00
Texas..... 1,536.95	North Carolina..... 3,100.00	Oregon..... 3,600.00
Utah..... 4,590.56	North Dakota..... 300.00	South Carolina..... 4,000.00
Washington..... 3,647.57	Oregon..... 4,100.00	South Dakota..... 1,000.00
Wisconsin..... 200.00	South Carolina..... 500.00	Texas..... 6,800.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, '910.
<i>Irrigation and drainage investigations, 1908, \$150,000—Continued.</i>	<i>Irrigation and drainage investigations, 1909, \$150,000—Continued.</i>	<i>Irrigation and drainage investigations, 1910, \$150,880—Continued.</i>
Wyoming..... \$15,684.82	South Dakota..... \$2,000.00	Virginia..... \$2,000.00
Reconnaissance surveys and advisory work..... 2,520.56	Tennessee..... 2,000.00	Utah..... 5,500.00
	Texas..... 3,700.00	Washington..... 4,000.00
	Utah..... 6,200.00	Wyoming..... 6,600.00
	Washington..... 4,500.00	Advisory and consulting irrigation field work..... 10,900.00
	Wyoming..... 10,050.00	Advisory and consulting drainage field work and special scientific investigations..... 8,000.00
	Reconnaissance drainage surveys and advisory field work..... 3,000.00	
	101,682.00	115,150.00
PROJECTS.	PROJECTS.	PROJECTS.
The expenditures in connection with the investigations were distributed largely among definite projects, the object and cost of each being stated below:	The expenditures in connection with the investigations have been distributed largely among definite projects, the object and estimated cost of each being as stated below:	The proposed expenditures in connection with the investigations will be distributed largely among definite projects, the object and estimated cost of each being as stated below:
On the use of water in irrigation.	On the use of water in irrigation and technical investigations.	On the use of water in irrigation and technical investigations.
Arid States (in general):	Technical investigations will include studies of losses of irrigation water and means of checking and preventing them carried on in sections where development has reached the limit of the water supply under present practice and extension of the irrigated area depends upon a more economical use of water; relation of the quantity of water used and stage of plant growth at which applied to yield and quantity of crops, carried on mainly in cooperation with State experiment stations; adaptation of methods of applying water to different types of soil and different crops.	The technical investigations will include studies of the losses of irrigation water and the means of checking and preventing them; the relation of the quantity of water used and the stage of plant growth at which it is applied to the yield and quantity of the crop; and the adaptation of methods of applying water to different types of soil and different crops. This will be carried on chiefly in cooperation with the State experiment stations.
Collection, collation, and preparation for publication of information relating to the preparation of land for irrigation; laying out and building farm ditches, construction of farm reservoirs; use of windmills for supplying water for irrigation, and the application of water to crops usually grown in these regions, such as alfalfa, potatoes, sugar beets, grains, etc..... 6,657.71	Arizona:	Arizona:
	Investigation and studies of irrigation practice and methods of preventing losses..... \$1,500.00	Studies of irrigation practice and methods of improvement..... 2,000.00
Arkansas:		
Investigations in the cost of pumping water for rice irrigation..... 317.83	California:	California:
California:	Studies of canal linings, evaporation losses and their prevention, percolation losses, and the adaptation of methods of soils..... \$1,300.00	Extensive studies of irrigation conditions in various parts of the State and demonstration in the adaptation of methods to crops and soils..... 6,500.00
Studies to determine the losses of irrigation water in present practice and the efficiency and cost of different methods of preventing these losses, including measurements of losses by seepage from ditches, and experiments to determine the effectiveness and cost of different kinds of canal linings; measurements of evaporation from the surface of soils to which water has been applied at different depths and which have received different degrees of cultivation after irrigation to determine what methods lead to the greatest economy of water; observations of the percolation of water applied to the soil by different methods to determine the effect of these methods in placing the water where it is of the greatest use to plants and in preventing waste either by percolation beyond the root zone or by surface flow. Studies of canal management and operation to determine the effect of different systems upon the economical use of water and upon the prosperity of the water users, including methods of delivering water to consumers and charges for water. Studies of methods and cost of preparing land for irrigation and of applying water to different crops for the purpose of determining their efficiency and compiling manuals giving practical directions for the use of beginners in irrigation..... 9,595.74	Imperial Valley..... 1,000.00	
	Sacramento Valley..... 500.00	
	San Joaquin Valley..... 1,000.00	
	Other sections..... 2,950.00	
	6,750.00	
Colorado:		
Experiments in the irrigation of sugar beets and orchards with a view to improving the practice in connection with the former and comparing the results of irrigation practice as usually followed, and with much less water, in connection with the latter..... 1,899.42	Colorado:	
	Comparison of results of irrigation of orchards under practice common to this section with Pacific coast methods to determine whether equally good results may be obtained with less water than is now commonly used. Experiments in the application of water to sugar beets by different methods and comparison with the general practice in this section, together with different degrees of cultivation after irrigation, to determine the effect upon the quantity of water needed by the crops..... 2,000.00	
	Eastern States (in general):	Eastern States (in general):
	Studies of irrigation practice throughout the humid sections of the Eastern United States, together with experiments testing the utility of cheaper methods.. 2,500.00	Studies of irrigation practice throughout the humid sections of the United States and experiments testing the value of different methods of applying water to truck and other crops..... 3,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Irrigation and drainage investigations, 1908, \$150,000—Continued.</i>	<i>Irrigation and drainage investigations, 1909, \$150,000—Continued.</i>	<i>Irrigation and drainage investigations, 1910, \$150,880—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>On the use of water in irrigation—Continued.</i>	<i>On the use of water in irrigation and technical investigations—Continued.</i>	<i>On the use of water in irrigation and technical investigations—Continued.</i>
Idaho:	Idaho:	Idaho:
Studies of methods of bringing new land into cultivation and the quantity of water required by such land; determination of the effect of using different quantities of water applied by different methods.....	Study of methods of bringing new land under cultivation and quantity of water required; determination of the effect of using different quantities of water applied by different methods; relation of the quantities of water and time of application to yield and quality of crop.....	Studies of methods of bringing new land under cultivation and quantities of water required; determination of the effect of using different quantities of water applied by different methods; and determination of the best methods of preparing land for irrigation and applying water to crops.....
\$2,131.48	\$2,000.00	\$3,000.00
Iowa:	Iowa:	Iowa:
Determination of the practicability of irrigation in regions where there is usually sufficient rainfall to raise profitable crops.....	Comparison of yields from similar plots, irrigated and unirrigated; irrigation of "water meadows" with sewage water and irrigation of meadows with stream water..	Experiments to determine the value of irrigation in the humid region and experiments in sewage irrigation.....
225.00	300.00	300.00
Kansas:	Kansas:	Kansas:
Determination of the cost of pumping water and the best methods of using water, and comparison of crops grown with and without irrigation.....	Study of methods of applying water in the Arkansas, Cimarron, and Republican valleys for the purpose of preventing losses and bringing about the most economical use and in pumping water for irrigation.....	Studies of methods of applying water to crops and experiments in winter irrigation to determine the practicability of applying water only during the winter and spring, when the water supply is ample.....
339.32	2,000.00	2,500.00
Louisiana:	Louisiana:	
Studies of methods of irrigating rice and measurements of the quantities of water used for the purpose of developing improved methods and bringing about a more economical use of water in sections where water is pumped and the quantity bears a direct relation to the cost of the products.....	Study of rice irrigation and the preparation of a report describing irrigation practice in rice growing.....	
1,701.07	1,000.00	
Minnesota:	Minnesota:	Minnesota:
To determine the practicability of irrigating uplands with water pumped from low-lying land with a view to improving both.....	Experiments in irrigation in lake region of northern Minnesota, where summer droughts prevail.....	Experiments in pumping water from swamped areas and applying it to uplands for the improvement of both.....
329.55	300.00	300.00
Montana:	Montana:	Montana:
Experiments in orchard irrigation with a view to suggesting improvements tending toward a more economical use of water, and to determine the effectiveness of different methods in preventing losses of water.....	Experiments in orchard irrigation in the Bitter Root Valley and the vicinity of Bozeman to determine the effects of different methods of applying water in conserving moisture.....	Experiments to determine the losses of water from irrigated lands by evaporation and the efficiency of methods of preventing these losses.....
801.01	2,000.00	250.00
	Nebraska:	Nebraska:
	Study and report of canal organization and management, and methods of applying water in the North Platte Valley to determine their influence upon the economical use of water.....	Studies of methods and cost of bringing new lands under irrigation, and experiments in winter irrigation.....
	1,000.00	1,000.00
Nevada:	Nevada:	Nevada:
Measurement of quantities of water used in irrigation at different points throughout the State and studies of methods of use with a view to securing the adoption of improved methods and the use of small quantities of water. Determination of the amount of water required for best results in growing grain, alfalfa, garden truck, and fruit, and collection of information in relation to the irrigation of orchards and alfalfa.....	Studies of the amount of water required for best results in growing grain, alfalfa, garden truck, and fruit, and best methods of irrigation of orchards and alfalfa, and adaptation of methods to soils and crops.....	Experiments to determine the losses of water from irrigated lands and methods of checking these losses, and studies of irrigation practice.....
2,269.30	1,000.00	1,000.00
New Mexico:	New Mexico:	New Mexico:
Determination of evaporation from soils and percolation of water applied in irrigation. Experiments in the application of water by different methods to determine their adaptability and their influence upon the quantity of water used.....	Determination of the evaporation from soils and percolation of water applied in irrigation, together with the study of general irrigation practice throughout the State.....	Experiments to determine the losses of water from irrigated lands by evaporation and methods of preventing these losses, and studies of irrigation practice throughout the Territory.....
1,038.42	1,600.00	1,500.00
North Carolina:	North Carolina:	
Determination of the best methods of applying water to truck crops in the eastern part of the State.....	Determination of the best methods of applying water to truck crops in the eastern part of the State..	
134.50	500.00	
North Dakota:	North Dakota:	North Dakota:
Investigations on the duty of water, including the measurements of evaporation from soils under different methods of application of water and of cultivation.....	Determination of the evaporation from soils under different methods of application of water and cultivation.....	Experiments to determine the losses from irrigated lands by evaporation, and methods of preventing these losses.....
359.75	200.00	500.00
Oregon:	Oregon:	Oregon:
Experiments in irrigation in the Willamette Valley to determine the practicability of irrigation in regions where the annual rainfall is heavy and summer droughts occur regularly.....	Investigations and experiments to determine the practicability of irrigation during the dry months throughout the Willamette Valley where the annual rainfall is very heavy, but summer droughts are regular and prolonged. Crops of unirrigated hops, alfalfa, corn, potatoes, onions, and small vegetables will be compared with like crops, irrigated with water pumped for the purpose. Experiments with alfalfa and clover will be made to determine the possibility of restoring worn out wheat lands by drainage during the dry season. Further experiments with irrigated and unirrigated orchards will be carried on.....	Investigations and experiments to determine the practicability of irrigation during the dry summer months in the Willamette Valley, and investigations of irrigation practice in eastern Oregon.....
4,887.15	4,000.00	3,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1232); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Irrigation and drainage investigations, 1908, \$150,000—Continued.</i>	<i>Irrigation and drainage investigations, 1909, \$150,000—Continued.</i>	<i>Irrigation and drainage investigations, 1910, \$150,880—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>On the use of water in irrigation—Continued.</i>	<i>On the use of water in irrigation and technical investigations—Continued.</i>	<i>On the use of water in irrigation and technical investigations—Continued.</i>
Texas:	Texas:	Texas:
Studies of the preparation of land for irrigation, the application of water to crops, pumping, conveyance, and measurements of water to consumers, with a view to advising as to the best methods of preparing land for irrigation, applying water, and removing surplus waters by means of drainage in a section just being settled and brought under irrigation.....	Studies of pumping, conveyance, and measurement of water to consumers, preparation of land for irrigation and application of water to crops in a section just being brought under irrigation and populated by settlers from humid regions to whom advice will be supplied.....	Studies of irrigation practice and the collection of information regarding agricultural conditions in the irrigated sections.....
\$1,536.95	\$2,700.00	\$2,800.00
Utah:	Utah:	Utah:
Determination of the quantity of water used in general practice and experiments to determine what quantities and method of application give the best results and rendering advice to new settlers; measurements of the quantities of water used in irrigation along certain streams in cooperation with the state engineer for use in determining rights to water from these streams.....	Study of organization to provide for equitable division of water among canal companies taking water from the same stream; determination of the quantities of water used in general practice; and experiments to determine what quantities of water give the best results and the best manner of applying water and providing new settlers with needed advice.....	Studies of irrigation practice and experiments to determine the quantities of water giving the best results.....
875.50	2,200.00	2,500.00
Washington:	Washington:	Washington:
Collection of information regarding existing canals, irrigation practice, quantities of water used, method of canal management, need of drainage under irrigation canals, cost of water rights in irrigated lands, for the purpose of providing such information to intending settlers; measurements of seepage losses from canals and leakage from flumes, and collection of information regarding methods adopted for checking these losses.....	Experiments in orchard irrigation in cooperation with local parties with a view to the improvement of methods and use of smaller quantities of water; determination of losses by evaporation...	Studies of irrigation practice through the State, and experiments to determine the losses of water from irrigated lands by evaporation, and methods of preventing them.....
3,647.57	4,000.00	3,500.00
Wisconsin:		
Study of irrigation practice and possibilities with a view to making such investigations and experiments as may be indicated by the investigation.....		
200.00		
Wyoming:	Wyoming:	
Measurements of water used and collection of information as to irrigation practice with a view to securing improvements in methods and in more economical use of water; collection of data regarding the use of windmills in pumping water for irrigation, together with different kinds of power.....	Investigation of and experiments with windmills and internal-combustion engines in order that practical information may be furnished in relation to wind records, the installation and operation of windmills, storage and transportation of waters, including reservoirs, tanks, and pipes, and the use of alcohol, kerosene, and gasoline as fuel in pumping engines used in connection with irrigation.....	
2,591.91	2,700.00	
41,539.18		
On irrigation extension:	On irrigation extension:	On irrigation extension:
Stations have been established and equipped in the semi-arid region to determine the possibilities of irrigation on the plains where stream water is not available in connection with dry farming or stock raising. The work done includes the use of flood water in spring, the storage and use of storm water, pumping with different kinds of engines and windmills, and experiments in applying water by different methods to determine how the largest use can be made of the small supplies available—	Experiments to determine the practicability of irrigation in sections where it has not been practiced generally, chiefly on the semiarid plains where river water is not available, the work including studies of the possibilities and cost of securing water supplies by pumping with windmills and different kinds of pumps and by storing storm waters, and studies of the methods of applying water in order to make the largest use of the small supply available. These experiments will be carried on at stations established for this purpose at different points on the plains. Similar studies are to be made in the humid sections of the Pacific Northwest and the eastern part of the United States—	Experiments to determine the practicability of irrigation in sections where it has not been practiced generally, chiefly on the semiarid plains where river water is not available, the work including studies of the possibilities and cost of securing water supplies by pumping with different kinds of power and different types of pumps and by storing storm waters; studies of the methods of applying water in order to secure the largest use of the small supply available. These studies will be carried on principally at stations established for that purpose—
Cheyenne, Wyo..... \$6,370.43	Cheyenne, Wyo.... \$4,000.00	Cheyenne, Wyo.... \$3,200.00
Newcastle, Wyo..... 4,404.91	Newcastle, Wyo.... 3,000.00	Newcastle, Wyo.... 2,800.00
Eads, Colo..... 3,880.06	Eads, Colo..... 3,000.00	Eads, Colo..... 2,800.00
14,655.40	10,000.00	8,800.00
	Aid and advice to settlers:	Aid and advice to settlers:
	It has been estimated that during the fiscal year 1909 there will be under ditch and ready for settlement 5,000,000 acres of land. It is proposed that field agents study the conditions under which irrigation must be practiced in the regions opening to settlement and give the settlers practical advice through demonstration, special bulletins, personal conference, public addresses, and correspondence....	Very large areas have been brought under canal during the past few years and these are being settled by farmers who are unfamiliar with irrigation. Aid is being extended to these settlers by personal advice supplemented very largely by the publication of bulletins on practical methods of bringing new land under irrigation and of applying water to crops; information regarding the opportunities for settlement and conditions to be met is also being supplied by means of bulletins.....
	10,900.00	10,900.00
Maintenance of headquarters for irrigation extension work and central supply and rating station.....	Maintenance of a central supply station and headquarters for irrigation extension work at Cheyenne, Wyo.....	Maintenance of a central supply station and headquarters for irrigation extension work at Cheyenne, Wyo.....
4,580.96	3,000.00	3,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Irrigation and drainage investigations, 1908, \$150,000—Continued.</i>	<i>Irrigation and drainage investigations, 1909, \$150,000—Continued.</i>	<i>Irrigation and drainage investigations, 1910, \$150,880—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
On drainage.	On drainage.	On drainage.
Arkansas: Ascertaining the value of wet lands and outlining general plan for drainage; investigation of the practicability of draining prairie land by roadside ditches and improving natural channels to prevent overflow; assisting in the initiation of actual drainage constructions by furnishing advice in the formation of drainage districts and in the adoption of the best plans for doing the work	Alabama: For surveying and preparing plans for drainage of a typical tract of land to be selected..... \$1,000.00 Arkansas: For ascertaining the value of wet lands and outlining general plans for drainage; for the continuation of drainage surveys on the lowlands bordering the Mississippi River, especially in the White and St. Francis basins; for investigations to determine the feasibility and cost of construction of the same; for investigations of the practicability of draining the prairie lands by means of roadside ditches, and improving the natural channels especially in the area where the cultivation of rice is rapidly extending; for tests of the effectiveness of underdrains in preparing the land for crops other than rice; for devising plans for the protection of the bottom lands along the river from overflow; and for improving generally malarial and insanitary conditions.....	Arkansas: For extending the surveys for the drainage of the lands in the St. Francis basin as a whole, and for determining the drainage units into which it should be divided; to determine the size of the ditches which should be employed; to assist local engineers and county drainage authorities in planning and directing the work; preliminary drainage surveys in parts of the State where questions arise among landowners regarding the feasibility of contemplated drainage works; examination of natural drainage streams and recommendations as to how they may be most effectually improved and the cost of the work required.....
\$4,509.50	11,931.13	\$6,000.00
California: Investigations to determine the feasibility of drainage where water has to be removed by pumping, the best systems for collecting water, and the most satisfactory type of machinery for pumping the water where pumping is necessary.....	Atlantic Coast States (in general): Investigations to determine the value of tidal marshes for agriculture and best methods of reclaiming same, including determination of system of diking to be adopted; methods of building same; methods of getting rid of the interior seepage water and of bringing soil into fit condition for agriculture.....	Atlantic Coast States (in general): Examination of coast dikes for sluices, and gates required the protection of tidal lands which may be made suitable for agriculture; determination of the cause of their failure and cost of stable structures; experiments with automatic sluice gates.....
980.00	415.00	2,000.00
Colorado: Investigations to determine the best methods of draining lands in the San Luis and Arkansas Valley where excess of water resulting from irrigation and accumulation of alkali threaten to result in the abandonment of large areas once under profitable irrigated cultivation; cooperation with farmers in relieving the soil of excessive amount of water and alkali which occurs where extensive irrigation is carried on for a number of years.....	California: For a survey to determine what outlets, if any, may be secured for the drainage of land at the base of the foothills of the Sacramento Valley; and for the continuation of experiments upon the drainage of the level lands near Fresno where pumping of drainage water is necessary.....	California: Development of plans for the organized drainage of lands in the Fresno and Tullock districts where both pumping and gravity drainage is required.....
2,565.01	1,000.00	2,000.00
Florida: Investigation to determine the feasibility of draining the Everglades, the most feasible method and probable cost, whether the character of the land when drained would be suitable for agricultural purposes, and the preparation of plans showing the best method of undertaking such drainage work.....	Colorado: Investigations and surveys to determine the best methods of draining lands in the San Luis Valley where seepage and alkali are making rapid inroads upon the cultivated area as well as preventing the extension of settlement of adjoining unimproved land; to study the feasibility of the reclamation of the injured lands which are now estimated to amount to 40,000 acres in this valley, and to inaugurate similar studies in the Gunnison, Grand, and Arkansas valleys.....	Colorado: Investigations to ascertain practical methods for reclaiming seeped lands in the valleys of the Grand and Gunnison rivers which are seriously injured by overirrigation and by alkali and preparation of drainage plans for landowners based upon the results of experiments and successful practice upon lands of similar character.....
4,744.03	2,300.00	4,000.00
	Delaware and Maryland: For field surveys to determine methods best adapted for the drainage and reclamation of the swamp and overflowed river bottom lands of the flat coastal plain region and its adaptation for agricultural uses after drainage.....	Delaware and Maryland: Continuation of investigations of swamps in Delaware at the head of the Pocomoke River; development of the Cedar swamp project surveyed in 1905; and for reclamation of agricultural lands bordering the Pocomoke River in Maryland.....
	1,350.00	2,000.00
	Florida: For the continuation of the investigations to determine the feasibility of draining the Everglades and the practicability of rendering portions of this swamp area available for the raising of citrus and other subtropical fruits, and the preparation of reports showing the best methods of undertaking the work....	Florida: Experiments in cooperation with landowners in draining small areas of the Everglade lands by means of dikes, ditches, and diverting drains.....
	4,000.00	2,000.00
	Georgia: Survey and preparation of plans for drainage of small tract in Floyd County.....	Georgia: Special examinations to ascertain the cost of cleaning small streams, prevention of sedimentation of drainage channels, and treatment of lands subject to overflow.....
	400.00	2,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Irrigation and drainage investigations, 1908, \$150,000—Continued.</i>	<i>Irrigation and drainage investigations, 1909, \$150,000—Continued.</i>	<i>Irrigation and drainage investigations, 1910, \$150,880—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
On drainage—Continued.	On drainage—Continued.	On drainage—Continued.
Illinois:	Illinois:	Illinois:
Preliminary studies and surveys to determine the best plans for preventing injury by overflow along the Little Wabash River and other similar streams in the southern portion of the State in order that the bottom lands may be used for agriculture; determination of the proper size of drainage ditches for lands of the type prevailing in the corn belt of Illinois; investigation and report upon the protection and drainage of the bottom lands along the Illinois River.....	For studies and surveys to determine the best plans for preventing injury by overflow along the Little Wabash River and other small streams in the southern portion of the State, and of freeing them of surplus rainfall so that they may be used for agriculture; to gather information regarding the size of ditches in operation ten years or more, the areas drained by them, efficiency as tested by experience, measurements of flow, observations of general conditions, rainfall and run-off data for use in determining the proper size of drainage ditches; and drain-tiled mains for lands of the type prevailing in the corn belt.....	Studies of the effect upon the lower valley lands of the extension district and farm drainage systems which have been in operation for a number of years; continuing the collection of data of run-off from drained areas of various dimensions and for the classification and compilation of such information.....
\$6,082.15	\$3,750.00	\$1,000.00
Indiana:	Indiana:	Indiana:
Completion of plan for the freer discharge and more complete drainage of the Kankakee based on the survey of the channel and bordering areas.....	Preparation of plans for a freer and more complete drainage of the Kankakee Valley.....	Studies in the drainage of turf land in the northern part of the State and investigations and plans for the drainage of lands in the valley of the Yellow River.....
183.77	100.00	1,000.00
Kansas:	Kansas:	Kansas:
Completion of the survey of the Neosho River and its contiguous agricultural bottom lands and the preparation of maps and a report showing the kind and cost of improvements necessary to control the river and protect the adjoining land.....	The preparation of maps and a report having to do with the kind and cost of improvements needed to control the Neosho River and protect the adjoining land.....	Determination of the value of tile drainage for the lands of southeastern Kansas, investigations to be carried on in cooperation with farmers.....
1,494.09	200.00	1,000.00
Louisiana:	Louisiana:	Louisiana:
Completion of plans for draining an area of 15,000 acres in Madison, La., and a general study of the possibilities of drainage throughout the lowlands of the Mississippi Delta. Investigation of the conditions affecting the maintenance and repair of drainage ditches, the customary methods of carrying on the work and its cost..	The collection of information relating to current construction of drainage ditches, conditions affecting their maintenance and repair, customary methods of carrying on the work and its cost, observations, measurements, etc., for use in computing the run-off from drainage areas.....	Determination of the cost of securing better drainage by opening and cleaning natural bayous in the northern part of the State and whether benefits secured will justify the expense. Special localities to be examined...
1,920.67	450.00	3,000.00
Minnesota:	Minnesota:	Minnesota:
Completion of experiments to determine the feasibility of the use of tile drains in sections where severe winters obtain. Assistance to farmers in the formation of drainage districts and the initiation of feasible, comprehensive, and adequate systems of drainage for definite areas.....	Report of experiments made with tile drains in a section where their successful use is doubtful on account of the long, cold winters and the depth (about 6 feet) to which the ground freezes.....	Further investigation of the drainage of turf lands, economic construction of drains through sandy land, and the collection of data regarding the effect of tile drains in the wheat lands of the Red River Valley.....
1,374.14	50.00	1,000.00
Mississippi:	Mississippi:	Mississippi:
The extension to other localities of the investigations begun in 1907 to determine the feasibility and approximate cost of main drainage systems, including a study of the practicability of cleaning out and enlarging natural but inadequate drainage outlets, and a comparison of the advantages and cost of such work with the advantages and cost of providing new artificial outlets to relieve certain sections of surplus water. Assisting the people in certain definite sections in initiating a feasible, comprehensive, and adequate system of drainage improvements.	Completion of reports of work already accomplished in this State and assistance in initiating a feasible, comprehensive, and adequate system of drainage improvements.....	Examination and development of plans for the drainage of areas in Sunflower and Holmes counties and for testing the efficiency of underdrains in Warren and Holmes counties.....
9,849.96	665.92	3,000.00
New Jersey:	Nebraska:	Nebraska:
Completion of investigation and report upon the best methods of reclaiming some 10,000 acres of tidal marsh, nonproductive and a menace to public health..	For the determination of the efficiency of tile drains in removing surplus water from the heavy bottom lands along the Platte River, and the preparation of general drainage plans for the reclamation of land along the valley where after being reclaimed the land might be valuable for sugar-beet production; field survey and allied investigations to determine the best plan for protecting from overflow and for drainage of about 80,000 acres of bottom land along the Logan River where the valley is from $\frac{3}{4}$ to 1 $\frac{1}{2}$ miles wide, and the land, though very valuable for cropping, is now overflowed and nearly useless; survey of Silver Creek from its source to its junction with the Platte to determine the location for an improved channel, cost of needed work, and extent of areas which should be benefited by such improvements.....	Surveys and plans for a general drainage system in Holt County and assisting drainage commissioners in carrying out the projects for which plans were made by this office in 1909.....
1,669.63	3,800.00	3,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.		Appropriations for the current fiscal year ending June 30, 1909.		Estimated expenditures for the fiscal year ending June 30, 1910.	
<i>Irrigation and drainage investigations, 1908. \$150,000—Continued.</i>		<i>Irrigation and drainage investigations 1909, \$150,000—Continued.</i>		<i>Irrigation and drainage investigations, 1910, \$150,880—Continued.</i>	
PROJECTS—continued.		PROJECTS—continued.		PROJECTS—continued.	
On drainage—Continued.		On drainage—Continued.		On drainage—Continued.	
North Atlantic States:		North Carolina:		North Carolina:	
Investigation to determine the value of tidal marshes for agricultural purposes; best methods of reclaiming, including the determination of best system of diking and methods of building, methods of getting rid of interior seepage water, and of bringing soil into condition for agriculture.....	\$394.04	Field survey and plans for the drainage of about 13,000 acres known as Angola Bay Swamp, together with plans for the construction of about 22 miles of ditches and aid in initiating of a comprehensive and adequate system of drainage; survey of the district around Lake Motamuskeet, and determination of elevation of Lake Phelps, Hongo Lake, New Lake, and Alligator Lake to obtain information needed in the preparation of complete plans for drainage and division into natural drainage districts of this section.....	\$2,600.00	Examination and plans for the drainage of portions of Robeson and Bladen counties, and for assisting the people in carrying out the plans prepared by this office in 1909.....	\$4,000.00
North Carolina:		North Dakota:		North Dakota:	
Investigations to determine the best method of draining the swamp and overflowed lands along the Roanoke and other rivers. Aid to landowners in initiating feasible, comprehensive, and adequate systems of drainage.....	2,486.26	Observations and records of 28 soil wells to determine the effectiveness of tile drainage in a section where the ground freezes to a depth of about 6 feet during the winter.....	100.00	Classification of observations and records showing the effect of experimental underdrains constructed in 1908.....	100.00
Oregon:		Oregon:		Oregon:	
Experiments with a 72-acre tract to determine the value of tile drainage in reclaiming unproductive "worn-out" wheat lands in the Willamette Valley.....	1,929.80	Observations of a tract of 72 acres drained by 18,000 feet of tile to determine the value of tile drainage in reclaiming unproductive "worn-out" land in the Willamette Valley.....	100.00	Classification of records and observations upon the effect of underdrains constructed near Albany in 1908.....	100.00
South Carolina:		South Carolina:		South Carolina:	
Investigation of conditions throughout the tidal regions of the State with a view to draining the river bottom lands of Charleston, Berkeley, and Dorchester counties, and to determine whether such lands may be protected from the inflow of salt water and fitted for dry-land crops; plans for the drainage of the lowlands bordering the upper part of Sampit Creek and its tributaries; determination of the best methods for the protection of fertile bottom lands from overflow at the time of river freshets and fitting such lands for the most profitable cultivation; experiments to determine the cost, satisfactory depth, and distance apart for tile drains in lands of the character examined; examination into the conditions which affect the drains of coast lands in general.....	4,217.19	Investigation to determine whether the tidal river lands in the vicinity of Charleston, Berkeley, and Dorchester counties may be protected from the inflow of salt water and fitted for dry-land crops; survey for the location of natural drainage channels for an area 5 by 6 miles bordering the upper part of Sampit Creek and its tributaries, and plans for the drainage of the lowlands bordering thereon; field survey of a section along the north side of Congaree River, Richland County, to determine the best methods to be adopted for the protection of fertile bottom lands which overflow at time of freshets in the river, and fitting such lands for the most profitable cultivation; making and preparation of plans which will utilize as far as possible the remains of levees constructed many years ago, collection of all available data as to frequency, duration, and height of freshets in the Congaree River, and nature of watershed from which the river is supplied.....	500.00	Further plans for the drainage of lands in the valley of the Congaree River and extension of drainage plans in Berkeley County.....	4,000.00
South Dakota:		South Dakota:		South Dakota:	
Investigation to determine the best plan for protecting from overflow and draining bottom lands along the Vermilion River where the valley varies from one-half to 3 miles in width.....	680.00	Field survey in Turner and Clay counties and plans for protecting from overflow and draining the bottom lands along the Vermilion River where the valley varies from one-half to 3 miles in width.....	2,000.00	Survey of the James River to determine improvements required for preventing the overflow of the lands bordering the channel.....	1,000.00
Survey to determine the kind and cost of improvements of lands in the Forked Deer Creek Valley from overflow, and if such protection proves practicable, the preparation of plans for the use of the landowners in carrying them out.....	2,000.00	Texas:		Texas:	
		Investigation to determine the effect that different depths and locations of ditches have in relieving soil in which large crops of rice were grown the first year under irrigation but which has since accumulated salt to such an extent that it has become unproductive, and to devise methods of drainage by means of which this land may be relieved.....	1,000.00	Investigations in the Brownsville district to ascertain methods that should be used in draining irrigated lands used for growing sugar cane.....	4,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (\$4 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Irrigation and drainage investigations, 1908, \$150,000—Continued.</i>	<i>Irrigation and drainage investigations, 1909, \$150,000—Continued.</i>	<i>Irrigation and drainage investigations, 1910 \$150,880—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
On drainage—Continued.	On drainage—Continued.	On drainage—Continued.
Utah:	Utah:	Utah:
The continuation and extension to other localities of the investigations begun in 1907 to determine the feasibility and profitableness of draining and reclaiming areas of land once under profitable cultivation by irrigation and subsequently injured or ruined by the accumulation of water and alkali; experiments to determine the most practicable materials available for use in construction of new drains suitable for installment in the various soils found in different counties throughout the State.....	Continuation of experiments and investigations to determine the possibility and profitableness of draining and reclaiming areas of land once under profitable cultivation by irrigation and subsequently ruined by the accumulation of water and alkali; experiment to determine the most practical materials available for use in constructing underdrains suitable for installing in the various soils found in different counties throughout the State...	Cooperative work with farmers in draining saturated and alkaline irrigated land and experiments with different materials for drains.....
\$3,715.06	\$4,000.00	\$4,000.00
Wyoming:	Washington:	Virginia:
Preliminary plans for drainage system for removal of surplus water and alkali from areas of irrigated land in which the accumulation of seepage water and alkali has ruined the land for crop production; experiments to determine the best plan of tile drainage and experimental demonstration of methods of draining large areas of land in this section; assisting in the initiation of actual drainage construction.....	Preparation of plans by which landowners may reclaim overflowed lands injured by seepage and alkali.....	Investigating the lands of the Dismal Swamp with reference to their drainage and examination of a part of the coastal lands of the State.....
2,317.57	500.00	2,000.00
Special and general investigations:	Wyoming:	Washington:
Preliminary field examinations of drainage projects for which the assistance of the office is requested, and reports of the nature, size, and probable cost of such projects, the collection of information upon current drainage practice and progress, the wide dissemination of available information both orally and by correspondence, and general advice and assistance to applicants...	Collection of information to determine the best methods to be used for the drainage of irrigated land to remove excessive and injurious amounts of water and alkali.	Cooperation with local interests in perfecting plans for draining the wet lands under the Moxee Canal.....
2,520.56	100.00	500.00
Miscellaneous, supplies, apparatus, furniture, etc.....	Special investigations and advisory field work:	Wyoming:
9,951.68	For the adequate scientific investigation of technical problems pertaining to land drainage concerning which there is lack of existing information, including drainage of hillside lands and muck lands which border on peat formations; movement and behavior of water in irrigated land; methods of testing cement drain tiles; loss of erosion and sedimentation of ditches; factors which determine the gradual variation in different classes of land with respect to the readiness with which they yield to drainage efforts; dissemination of the results of investigations by means of lectures, addresses, and oral or written reports to those directly interested in the various projects.....	Cooperation with farmers of irrigated land in the Big Horn Basin in planning drainage ditches for wet lands.....
General planning and supervision of irrigation and drainage investigations throughout the United States; preparation of reports, drafting, and other work on illustrations, correspondence with field agents and public, purchase of field instruments and accessories, etc.....	Reserve:	1,000.00
18,792.72	Investigations for which plans have not yet been definitely formulated; provision for costs in excess of allotments; emergency work and new projects...	Advisory and consulting work:
	4,000.00	Examinations, upon request of engineers and drainage boards, of proposed drainage plans and advisory reports upon the same; consultation with state committees upon drainage policies and laws and feasibility of large drainage improvements, plans for which are in the hands of special local engineers.....
	Miscellaneous, supplies, apparatus, furniture, etc.....	4,000.00
	10,000.00	Special scientific investigations:
	General planning and supervision of irrigation and drainage investigations throughout the United States; preparation of reports; drafting and other work on illustrations; correspondence with field agents and the public; purchase of field instruments and accessories, etc.....	Relating to run-off to be provided for in different climates and different kinds of lands; effect of underdrains of different kinds and in different soils upon the water content; of the use of cement drain tile; lectures, addresses, and written articles for the dissemination of popular information upon the subject ..
	20,537.95	4,000.00
Total of all appropriations for the Office of Experiment Stations, including \$292.32 derived from sale of card indexes.....	Total of all appropriations for the Office of Experiment Stations (an increase over 1908 of \$21,107.68)	Reserve:
293,512.32	314,620.00	Investigations for which plans have not been definitely formulated; provision for costs in excess of allotments and for new projects which later developments may demand.....
Total expenditures to September 30, 1908.....		10,180.00
285,924.93		Miscellaneous, supplies, apparatus, furniture, etc.....
Outstanding liabilities on September 30, 1908 (estimated) ..		6,350.00
3,356.52		General planning and supervision of irrigation and drainage investigations throughout the United States; preparation of reports; drafting and other work on illustrations; correspondence with field agents and the public; purchase of field instruments and accessories, etc.....
Balance to be turned back in Treasury (estimated).....		20,000.00
4,230.87		
		Total amount estimated for the Office of Experiment Stations (an increase over 1909 of \$35,540.00)
		350,160.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

OFFICE OF PUBLIC ROADS.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Office of Public Roads, 1908, \$12,390.</i>		
Page, L. W. Director, at \$2,750.....	1 director, who shall be a scientist and have charge of all scientific and technical work.....	1 director, who shall be a scientist and have charge of all scientific and technical work.....
Eldridge, M. O. Chief of records, at \$1,600.....	1 chief of records.....	NOTE.—One chief of records, at \$1,600, dropped (changed to chief clerk).
Pennybacker, J. E., jr. Editorial clerk, at \$1,200.....	1 editorial clerk.....	1 chief clerk, (in lieu of one chief of records, at \$1,600, dropped, as above).....
Cobb, Marguerite..... Clerk, class one.....	2 clerks, class one.....	NOTE.—One editorial clerk, at \$1,200, dropped (included in clerks of class one).
Draper, A. E. Clerk, at \$1,000.....	3 clerks, at \$1,000 each.....	4 clerks, class one (increase of 2, 1 in lieu of 1 editorial clerk, at \$1,200, dropped, as above, and 1 by transfer from lump fund).....
Kelsey, F. G. Clerk, at \$1,000.....	2 clerks, at \$720 each.....	4 clerks, at \$1,000 each (increase of 1 by transfer from lump fund).....
Robey, E. R. Clerk, at \$1,000.....	Total of above appropriation (no increase over 1908) ...	1 clerk (submitted).....
Davies, Alice L. Clerk, at \$1,000.....	12,390.00	NOTE.—Two clerks, at \$720 each, dropped.
Francis, Grace..... Clerk, at \$1,000.....		2 laborers, at \$600 each (by transfer from lump fund).....
Hansen, Leopoldine..... Clerk, at \$720.....		1 messenger (by transfer from lump fund).....
Gordon, Hilda M. Clerk, at \$720.....		1 messenger boy (by transfer from lump fund).....
Pierce, Anna L. Clerk, at \$720.....		Total amount estimated (an apparent increase over 1909 of \$3,820).....
Wells, E. M. Clerk, at \$720.....		16,210.00
Total.....		NOTE.—The apparent increase is \$3,820, but not considering the places transferred from the lump fund there is an actual decrease of \$540.
Unexpended balance.....		The above force will perform the following duties:
Total of above appropriation.....		Administrative and executive:
		1 director.....
		1 chief of records.....
		Editorial and library:
		1 clerk, class one.....
		Correspondence and files:
		3 clerks, at \$1,000.....
		2 clerks, at \$720 each.....
		Accounts and property:
		2 clerks, class one.....
		Janitor and care of machinery:
		2 laborers, at \$600.....
		Messenger service:
		1 messenger, at \$600.....
		1 messenger boy, at \$360.....
		Public-road inquiries, 1908, \$57,660.
Salaries:	Salaries:	Salaries:
In Washington.....	In Washington.....	In Washington.....
Out of Washington.....	Out of Washington.....	Out of Washington.....
Stationery.....	Stationery.....	Stationery.....
Miscellaneous supplies and services, equipment, books, machinery, etc.....	Miscellaneous supplies and services, equipment, books, machinery, etc.....	Miscellaneous supplies and services, equipment, books, machinery, etc.....
Furniture.....	Furniture.....	Furniture.....
Freight.....	Freight.....	Freight.....
Express.....	Express.....	Express.....
Telegraph.....	Telegraph.....	Telegraph.....
Telephone.....	Telephone.....	Telephone.....
Rent.....	Rent.....	Rent.....
Apparatus, instruments, and laboratory material.....	Apparatus, instruments, and laboratory material.....	Apparatus, instruments, and laboratory material.....
Travel and station and field expenses.....	Travel and station and field expenses.....	Travel and station and field expenses.....
Total expenditures to September 30, 1908.....	Total amount of above appropriation (an increase over 1908 of \$17,340).....	Total amount estimated (an apparent increase over 1909 of \$35,240).....
Outstanding liabilities on September 30, 1908 (estimated).....	75,000.00	110,240.00
Balance to be turned back in Treasury (estimated).....		NOTE.—Apparent increase \$35,240, but adding the net saving in salaries of places transferred to the statutory roll, amounting to \$4,360, the actual increase is \$39,600.
Total amount of above appropriation.....		NOTE.—The above estimates of expenditures, classified in accordance with the suggestions of the congressional Committee on Expenditures for this department, have been submitted as necessary for prosecuting the important work of the Office of Public Roads. This work will fall naturally under the following projects:

NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional Committee on Expenditures for this department, were necessary in prosecuting the important work of the Office of Public Roads. This work fell naturally under the following projects:

NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional Committee on Expenditures for this department, are being incurred in prosecuting the important work of the Office of Public Roads. This work falls naturally under the following projects:

NOTE.—The above estimates of expenditures, classified in accordance with the suggestions of the congressional Committee on Expenditures for this department, have been submitted as necessary for prosecuting the important work of the Office of Public Roads. This work will fall naturally under the following projects:

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of Public Roads—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Public-road inquiries, 1908, \$57,660—Continued.</i>	<i>Public-road inquiries, 1909, \$75,000—Cont'd.</i>	<i>Public-road inquiries, 1910, \$110,240—Cont'd.</i>
PROJECTS.	PROJECTS.	PROJECTS.
(1) Object-lesson roads (Mr. Vernon M. Peirce, chief engineer, in charge).	(1) Object-lesson roads (Mr. Vernon M. Peirce, chief engineer, in charge).	(1) Object-lesson roads (Mr. Vernon M. Peirce, chief engineer, in charge).
Salaries..... \$14,190.62	Salaries..... \$15,000.00	Salaries..... \$16,500.00
Travel expenses..... 3,085.04	Travel expenses..... 4,000.00	Travel expenses..... 4,000.00
Miscellaneous expenses..... 632.61	Miscellaneous expenses..... 1,000.00	Miscellaneous expenses..... 1,000.00
\$17,908.27	\$20,000.00	\$21,500.00
The object-lesson method is designed to introduce standard forms of construction and maintenance throughout the country. The procedure is as follows: Upon request of local authorities, engineers are assigned to make survey, prepare plans and specifications, and supervise the construction of a short section of road of the materials selected after physical tests made in the laboratory of this office. During the construction the local men are given thorough instruction, so that upon the departure of the government engineers the road work will go on according to correct methods.		
(2) Instruction in highway engineering (Dr. A. S. Cushman, Assistant Director, and Mr. Vernon M. Peirce, chief engineer, in charge):	(2) Instruction in highway engineering (Dr. A. S. Cushman, Assistant Director, and Mr. Vernon M. Peirce, chief engineer, in charge):	(2) Instruction in highway engineering (Dr. A. S. Cushman, Assistant Director, and Mr. Vernon M. Peirce, chief engineer, in charge):
Salaries..... \$3,451.67	Salaries..... \$3,600.00	Salaries..... \$6,600.00
Expenses..... 2,301.87	Expenses..... 2,950.00	Expenses..... 5,450.00
5,753.54	6,550.00	12,050.00
After a competitive examination held by the Civil Service Commission a small number of graduates of engineering schools are appointed to the position of civil engineer student at a salary of \$50 per month and field expenses. They continue in this position for a period of one year, during which they are given opportunity to acquire practical knowledge of every branch of road work, both in the field and the laboratories. At the end of one year they are retained and promoted to the position of junior highway engineer, or given certificates showing that they have completed a graduate course in highway engineering with this office. The instruction is not gratuitous, as the engineer students render valuable service from the outset. The plan ultimately results in the formation of a trained corps of highway engineers for the government service, which is also a constant source of supply from which the various States and counties may secure competent men to direct their road work. The project is gradually being amplified by cooperation with engineering schools looking to the introduction of practical courses of instruction in highway engineering.		
(3) Testing road materials (Dr. A. S. Cushman, Assistant Director, in charge):	(3) Testing road materials (Dr. A. S. Cushman, Assistant Director, in charge):	(3) Testing road materials (Dr. A. S. Cushman, Assistant Director, in charge):
Salaries..... \$5,345.50	Salaries..... \$5,000.00	Salaries..... \$5,000.00
Expenses..... 460.94	Expenses..... 300.00	Expenses..... 800.00
5,806.44	5,300.00	5,800.00
This project involves the microscopic and chemical analyses of road materials to determine the relative hardness, toughness, cementing value, and resistance to wear of each sample. These tests are designed to approximate field conditions and make possible an intelligent selection of materials for road building.		
(4) Road management and accounting (Mr. J. E. Pennybacker, jr., chief of road management, in charge):	(4) Road management and accounting (Mr. J. E. Pennybacker, jr., chief of road management, in charge):	(4) Road management and accounting (Mr. J. E. Pennybacker, jr., chief of road management, in charge):
Salaries..... \$844.83	Salaries..... \$4,500.00	Salaries..... \$4,500.00
Expenses..... 13.24	Expenses..... 2,500.00	Expenses..... 2,500.00
858.07	7,000.00	7,000.00
This project involves an investigation of road laws and systems of road management in this and foreign countries, and the preparation of bulletins explaining the state aid and state supervision plan, the county and township systems, needed improvements in road accounting, and various economic questions connected with road building, such as the use of convict labor traffic regulations, etc.		
(5) Lectures, addresses, and papers (Mr. L. W. Page, Director, in charge).	(5) Lectures, addresses, and papers (Mr. L. W. Page, Director, in charge):	(5) Lectures, addresses, and papers (Mr. L. W. Page, Director, in charge):
Salaries..... \$1,683.77	Salaries..... \$2,000.00	Salaries..... \$2,000.00
Expenses..... 2,052.98	Expenses..... 2,200.00	Expenses..... 2,200.00
3,736.75	4,200.00	4,200.00
This is not, strictly speaking, a project within itself for the reason that the office has no employees who may be termed lecturers. There is a constant and increasing demand for representatives of this office to address public meetings, and in many cases assignments are made of such officials or employees as are immediately available. Much practical information and instruction are given in this way, and undoubtedly exert a beneficial influence in directing public sentiment in the best channels.		
(6) Special advice and inspection (Dr. A. S. Cushman, Assistant Director, and Mr. Vernon M. Peirce, chief engineer, in charge).	(6) Special advice and inspection (Dr. A. S. Cushman, Assistant Director, and Mr. Vernon M. Peirce, chief engineer, in charge):	(6) Special advice and inspection (Dr. A. S. Cushman, Assistant Director, and Mr. Vernon M. Peirce, chief engineer, in charge):
Salaries..... \$3,119.93	Salaries..... \$2,100.00	Salaries..... \$4,100.00
Expenses..... 1,847.19	Expenses..... 700.00	Expenses..... 1,500.00
4,967.12	2,800.00	5,600.00
This project embraces the general advisory work of the office, and most of the preliminary inspection in which experienced engineers determine the character of assistance needed.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of Public Roads—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Public-road inquiries, 1908, \$57,660—Continued.</i>	<i>Public-road inquiries, 1909, \$75,000—Cont'd.</i>	<i>Public-road inquiries, 1910, \$110,240—Cont'd.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(7) Dust prevention and dustless roads (Mr. L. W. Page, Director, in charge).	(7) Dust prevention and dustless roads (Mr. L. W. Page, Director, in charge).	(7) Dust prevention and dustless roads (Mr. L. W. Page, Director, in charge).
Salaries..... \$1,869.73	Salaries..... \$4,500.00	Salaries..... \$8,300.00
Expenses..... 627.29	Expenses..... 1,500.00	Expenses..... 6,600.00
\$2,497.02	\$6,000.00	\$14,900.00
In recent years the most important and difficult problem which has engaged the attention of highway engineers is the preservation of macadam roads from the destructive effects of modern motor traffic. So important is this question considered at the present time that an International Road Congress has been called to meet at Paris in October of this year for the consideration of this and kindred questions. The French Government has taken up the matter officially, and upon its invitation the President of the United States has designated a commission to represent the Federal Government at the Congress, naming the director of this office as chairman.		
This office is conducting experiments with various dust preventives as palliatives, and with new forms of construction for the purpose of evolving a dustless road.		
(8) Standardization of tests (Mr. L. W. Page, Director, in charge).	(8) Standardization of tests (Mr. L. W. Page, Director, in charge).	(8) Standardization of tests (Mr. L. W. Page, Director, in charge).
Expenses..... 37.00	Salaries..... \$200.00	Salaries..... \$200.00
This project, while exceedingly important so far as results are concerned, involves very little expenditure of money. It is designed to perfect as nearly as possible all tests of road materials and to have them adopted as standard, so that uniformity in results may be secured.	Expenses..... 200.00	Expenses..... 200.00
	400.00	400.00
(9) Introduction of model systems of construction, maintenance, and administration (Mr. L. W. Page, Director, and Mr. Vernon M. Peirce, chief engineer, in charge).	(9) Introduction of model systems of construction, maintenance, and administration (Mr. L. W. Page, Director, and Mr. Vernon M. Peirce, chief engineer, in charge).	(9) Introduction of model systems of construction, maintenance, and administration (Mr. L. W. Page, Director, and Mr. Vernon M. Peirce, chief engineer, in charge).
Salaries..... \$1,112.05	Salaries..... \$1,600.00	Salaries..... \$5,200.00
Expenses..... 241.83	Expenses..... 1,000.00	Expenses..... 1,500.00
1,353.93	2,600.00	6,700.00
Under this project engineers are assigned, upon request of local authorities, to investigate roads, materials, organization, methods of administration, construction, and maintenance, and all features in connection with the road work of a given county, and to prepare an exhaustive report giving full information on all these, and recommendations for the future construction, maintenance, and administration of the roads, the report to be accompanied by plans and estimates where practicable. The purpose is to introduce in certain selected counties in various sections of the country model systems which will serve as object lessons for other counties.		
(10) Investigation of road materials in the several States (Mr. L. W. Page, director, in charge).	(10) Investigation of road materials in the several States (Mr. L. W. Page, director, in charge).	(10) Investigation of road materials in the several States (Mr. L. W. Page, director, in charge).
Salaries..... \$213.40	Salaries..... \$600.00	Salaries..... \$600.00
Expenses..... 6.25	Expenses..... 300.00	Expenses..... 300.00
219.65	900.00	900.00
The appropriation bill for this office provides specifically for an investigation of road materials in the several States. It is manifest, however, that the appropriation for this office is inadequate to conduct such an investigation on a comprehensive scale. Fortunately, a partial solution of the problem has been devised by a cooperative arrangement with the Geological Survey, whereby the geologists of the survey will cooperate with this office by making field investigations of road materials and securing specimens for transmission to this office. Laboratory tests and such special field work as may be necessary will be done under the direction of this office, and the bulletins will be issued by the Department of Agriculture.		
(11) Sand-clay and burnt-clay roads (Mr. Vernon M. Peirce, chief engineer, in charge).	(11) Sand-clay and burnt-clay roads (Mr. Vernon M. Peirce, chief engineer, in charge).	(11) Sand-clay roads (Mr. Vernon M. Peirce, chief engineer, in charge).
Salaries..... \$1,535.20	Salaries..... \$1,650.00	Salaries..... \$4,950.00
Expenses..... 590.25	Expenses..... 750.00	Expenses..... 1,850.00
2,125.45	2,400.00	6,800.00
The construction of roads by mixing sand and clay in proper proportions and according to certain methods has produced satisfactory roads in many parts of the South. The method is simple, but unfortunately it has not been utilized to the extent which its success warrants. There is reason to believe that the method may be successfully adopted in many of the prairie States, and it is the purpose of the office to conduct experiments with this form of construction and to introduce it wherever it may be successfully employed.		
(During the fiscal years 1908 and 1909 sand-clay and burnt-clay roads were considered as one project. Beginning with the fiscal year 1910 they will be considered as separate projects and allotments and estimates made accordingly.)		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

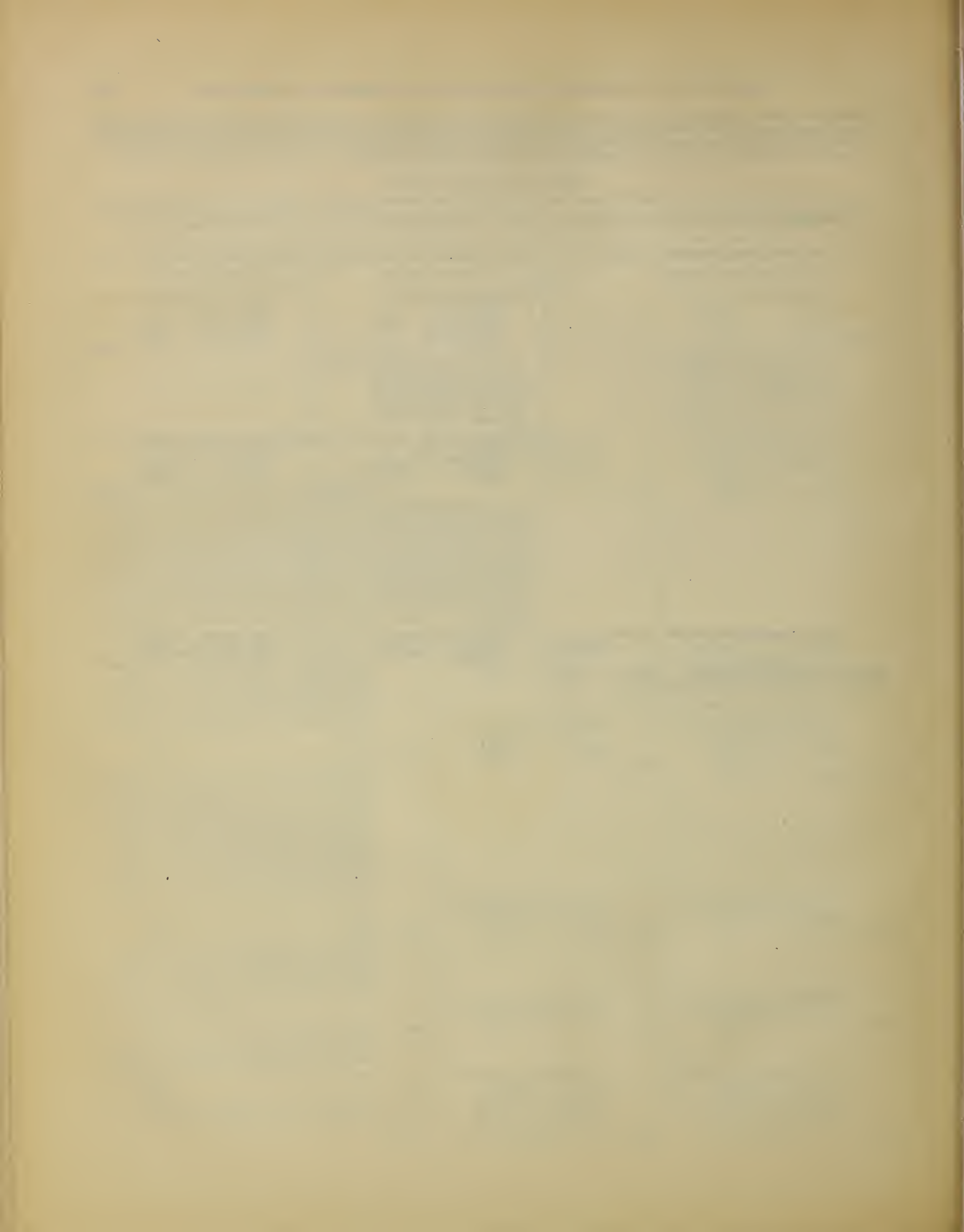
Office of Public Roads—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Public-road inquiries, 1908, \$57,660—Continued.</i>	<i>Public-road inquiries, 1909, \$75,000—Cont'd.</i>	<i>Public-road inquiries, 1910, \$110,240—Cont'd.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(12) (Included in project 11.)	(12) (Included in project 11.)	(12) Burnt-clay roads (Mr. Vernon M. Peirce, chief engineer, in charge). Salaries..... \$3,300.00 Expenses..... 1,000.00 \$4,300.00 Experiments have demonstrated that under favorable conditions the burnt-clay road is a success, and a more thorough investigation will be undertaken by the office for the purpose of testing the various kinds of clay, methods of burning with different kinds of fuel, etc.
(13) Investigation of slag (Dr. A. S. Cushman, Assistant Director, and Mr. Vernon M. Peirce, chief engineer, in charge). Salaries..... \$520.55 Expenses..... 92.75 \$613.30 It has been estimated that some 20,000,000 tons of slag are produced in the various blast furnaces of this country annually. To a very large extent this by-product would become available for road construction if it possessed the necessary physical properties. Except in a few cases blast-furnace slag does not possess sufficient binding power for use as a road material, but investigations carried on by this office indicate great possibilities in the use of slag in combination with other materials for road building. For instance, by the addition of a certain amount of lime or limestone the binding power is greatly increased. It is also probable that slag in combination with bituminous binders may be successfully employed in the building of roads which would be practically dustless. Exhaustive field tests will be carried on with this material during the fiscal year 1910.	(13) Investigation of slag (Dr. A. S. Cushman, Assistant Director, and Mr. Vernon M. Peirce, chief engineer, in charge). Salaries..... \$700.00 Expenses..... 300.00 \$1,000.00	(13) Investigation of slag (Dr. A. S. Cushman, Assistant Director, and Mr. Vernon M. Peirce, chief engineer, in charge). Salaries..... \$1,800.00 Travel expenses.. 500.00 Miscellaneous expenses..... 1,000.00 3,300.00
(14) Cooperation with county newspapers (Mr. J. E. Pennybacker, jr., chief of road management, in charge). Salaries..... 460.00 Under this project practical articles dealing with the elementary principles of road construction and maintenance are prepared in this office and sent out to county newspapers which have agreed to publish them in conjunction with a question column. It is hoped that by this means much improvement in existing methods can be obtained.	(14) Cooperation with county newspapers (Mr. J. E. Pennybacker, jr., chief of road management, in charge). Salaries..... 1,500.00	(14) Cooperation with county newspapers (Mr. J. E. Pennybacker, jr., chief of road management, in charge). Salaries..... 1,500.00
(15) Corrosion of iron and steel (Dr. A. S. Cushman, Assistant Director, in charge). Salaries..... \$1,274.84 Expenses..... 100.50 1,375.34 This investigation was begun for the purpose of determining the cause of corrosion of metal road culverts and to discover, if possible, means of preventing or minimizing the corrosion. The investigation thus far has produced data of great scientific and practical value which are set forth in publications issued by the office. The results of the work have already proved of great benefit to road builders, as several of the rolling mills have entirely changed their methods of manufacture as a result of these investigations, and it is now possible to obtain culverts made of metal which is 99.96 per cent pure iron. This investigation should result in much benefit to the farmers, in view of the great loss which farmers suffer through corrosion of fence wire.	(15) Corrosion of iron and steel (Dr. A. S. Cushman, Assistant Director, in charge). Salaries..... \$1,600.00 Expenses..... 200.00 1,800.00	(15) Corrosion of iron and steel (Dr. A. S. Cushman, Assistant Director, in charge). Salaries..... \$1,600.00 Travel expenses.. 700.00 Miscellaneous expenses..... 500.00 2,800.00
(16) Split-log drag (Mr. D. Ward King, expert, in charge). Salaries..... \$182.25 Expenses..... 51.06 233.31 The usefulness of the split-log drag in the maintenance of earth roads is universally acknowledged. In view of the fact that there are approximately 2,600,000 miles of earth roads in the United States, the widest possible introduction of this simple, inexpensive, and exceedingly effective implement should be brought about.	(16) Split-log drag (Mr. D. Ward King, expert, in charge). Salaries..... \$700.00 Expenses..... 300.00 1,000.00	(16) Split-log drag (Mr. D. Ward King, expert, in charge). Salaries..... \$1,600.00 Expenses..... 900.00 2,500.00
(17) Classification of road materials (Dr. E. C. E. Lord, petrographer, in charge). Salaries..... 700.00 Under this project road materials are classified according to their mineral composition and a study is made of the relationship existing between the mineral composition and the physical properties of road materials.	(17) Classification of road materials (Dr. E. C. E. Lord, petrographer, in charge). Salaries..... 700.00	(17) Classification of road materials (Dr. E. C. E. Lord, petrographer, in charge). Salaries..... 700.00
(18) Bibliography on roads (Mr. Archer B. Hulbert, expert, in charge). Salaries..... 368.00	(18) Bibliography on roads: (No expenditure during this fiscal year.)	(18) Bibliography on roads: (No expenditure during this fiscal year.)
(19) Administration, including rent of office, maintenance of machine shop, contingent expenses, messengers, laborers, etc., in Washington..... 8,519.54	(19) Administration, including rent of office, maintenance of machine shop, contingent expenses, messengers, laborers, etc., in Washington..... 8,850.00	(19) Administration, including rent of office, maintenance of machine shop, contingent expenses, messengers, laborers, etc., in Washington..... 4,490.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909—Continued.

Office of Public Roads—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Public-road inquiries, 1908, \$57,660—Continued.</i>	<i>Public-road Inquiries, 1909, \$75,000—Cont'd.</i>	<i>Public-road inquiries, 1910, \$110,240—Cont'd.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
	(20) Traction tests (Prof. E. B. McCormick, consulting engineer, in charge). Salaries..... \$350.00 Travel expenses.. 225.00 Materials and miscellaneous..... 425.00 \$1,000.00 An exhaustive series of tests will be conducted during the current fiscal year and the fiscal year 1910 for the purpose of determining the comparative effect of various widths of tire, various grades, and road surfaces on tractive resistance.	(20) Traction tests (Prof. E. B. McCormick, consulting engineer, in charge). Salaries..... \$500.00 Travel expenses.. 250.00 Miscellaneous.... 250.00 \$1,000.00
	(21) Inspection of rural delivery roads (Mr. Vernon M. Peirce, chief engineer, in charge). Salaries..... \$600.00 Expenses..... 400.00 1,000.00 The Fourth Assistant Postmaster-General notifies this office, from time to time, of rural delivery roads in bad state of repair. The office thereupon tenders to the local authorities having jurisdiction the services of an engineer to inspect the road and give advice and instruction for its repair and maintenance. This project works to the advantage of all parties concerned, and does not in any way infringe upon the authority of local officials.	(21) Inspection of rural delivery roads (Mr. Vernon M. Peirce, chief engineer, in charge). Salaries..... \$2,400.00 Expenses..... 1,400.00 3,800.00
Total of all appropriations for Office of Public Roads..... \$70,050.00	Total of all appropriations for Office of Public Roads (an increase over 1908 of \$17,340)..... 87,390.00	Total amount estimated for Office of Public Roads (an increase over 1909 of \$39,060)..... 126,450.00
Total expenditures to September 30, 1908..... 68,239.52		
Outstanding liabilities on September 30, 1908 (estimated).... 1,644.82		
Balance to be turned back in Treasury (estimated)..... 165.66		



DEPARTMENT OF AGRICULTURE

REPORT OF THE FOREST SERVICE

SHOWING

EXPENDITURES DURING THE FISCAL YEAR 1908, APPRO-
PRIATIONS FOR THE FISCAL YEAR 1909, AND
EXPENDITURES PROPOSED FOR THE
FISCAL YEAR 1910

NOTE.—This report was not included in the general report of the Department of Agriculture, as the law requires a separate report from the Forest Service. (Statutes at Large 34, p. 1270)



JANUARY 4, 1909.—Referred to the Committee on Agriculture and ordered to be printed

WASHINGTON
GOVERNMENT PRINTING OFFICE
1909

DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, December 31, 1908.

SIR: As required by 34 Statutes, page 1270, I have the honor to transmit herewith a separate report of the classified and detailed estimates of every subject of expenditure intended for the Forest Service of the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation of that bureau for such service during the fiscal year ended June 30, 1908; to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended during the current fiscal year ending June 30, 1909.

The report for the balance of the department, as required by 34 Statutes, page 1282, was forwarded on December 14, 1908.

A copy of the above-mentioned report of the Forest Service has also been transmitted to the President of the Senate.

Very respectfully,

JAMES WILSON,
Secretary.

THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

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Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1909.

FOREST SERVICE.

Detailed expenditures for the fiscal year ended June 30, 1908.			Appropriations for the current fiscal year ending June 30, 1909.		Estimated expenditures for the fiscal year ending June 30, 1910.	
Salaries, Forest Service, \$143,200.			Salaries, Forest Service, \$144,300.		Salaries, Forest Service, \$60,200.	
Pinchot, Gifford.....	Forester, at \$5,000.....	\$5,000.00	1 forester, who shall be Chief of Bureau.....	\$5,000.00	1 forester, who shall be Chief of Bureau.....	\$5,000.00
McVean, Milton J.....	Clerk, at \$2,100.....	2,100.00	1 clerk.....	2,100.00	NOTE.—The following places have been dropped:	
Anderson, George G.....	Clerk, at \$1,900.....	1,900.00	1 clerk (increase of \$100 submitted).....	2,000.00	1 clerk.....	\$2,100
Hill, Harry L.....	Clerk, class 4.....	1,800.00	6 clerks, class 4 (increase of 1 submitted).....	10,800.00	1 clerk.....	2,000
Melzar, Ernest A.....	Clerk, class 4.....	1,800.00	3 clerks, at \$1,700 each.....	5,100.00	6 clerks, class 4 (2 of whom are transferred to the Division of Accounts and Disbursements).....	10,800
Satterlee, Jerome B.....	Clerk, class 4.....	1,800.00	1 clerk, class 3.....	1,600.00	3 clerks, at \$1,700 each.....	5,100
Tibbott, Osmund H.....	Clerk, class 4.....	1,800.00	2 clerks, at \$1,500 each.....	3,000.00	1 clerk, class 3.....	1,600
Metcalf, Hermon C.....	Clerks, class 4.....	\$1,050.00	2 clerks, class 2.....	2,800.00	1 clerk.....	1,500
Craft, Quincy R.....	Clerk, at \$1,700.....	750.00	1 clerk.....	1,300.00	2 clerks, class 2 (1 of whom is transferred to the Division of Accounts and Disbursements).....	2,800
Shir-Cliff, William H.....	Clerk, at \$1,700.....	1,700.00	8 clerks, class 1.....	9,600.00	1 clerk.....	1,300
Lees, Fred.....	Clerks, at \$1,700.....	1,345.83	7 clerks, at \$1,100 each.....	7,700.00	8 clerks, class 1.....	9,600
Staley, William F.....	Clerks, at \$1,700.....	354.17	10 clerks, at \$1,000 each (decrease of 1 by transfer to Secretary's roll).....	10,000.00	7 clerks, at \$1,100 each.....	7,700
Craft, Quincy R.....	Clerks, at \$1,700.....	991.66	12 clerks, at \$900 each.....	10,800.00	10 clerks, at \$1,000 each.....	10,000
Helphenstine, R. K., jr.....	Clerks, at \$1,700.....	708.34	19 clerks, at \$800 each.....	15,200.00	19 clerks, at \$800 each.....	15,200
Duffy, John J.....	Clerk, class 3.....	1,600.00	27 clerks, at \$700 each.....	18,900.00	27 clerks, at \$700 each.....	18,900
Fuchs, William R.....	Clerk, at \$1,500.....	1,500.00	18 clerks, at \$600 each.....	10,800.00	18 clerks, at \$600 each.....	10,800
Squire, Charles H.....	Clerk, at \$1,500.....	1,500.00	1 draftsman (increase of \$200 submitted).....	2,000.00	1 draftsman.....	2,000
Williams, Gross H.....	Clerk, class 2.....	1,050.00	2 draftsmen, at \$1,400 each.....	2,800.00	2 draftsmen, at \$1,400 each.....	2,800
Smith, A. Mark.....	Clerks, class 2.....	318.89	2 draftsmen, at \$1,200 each.....	2,400.00	2 draftsmen, at \$1,200 each.....	2,400
Moore, Felix T.....	Clerks, at \$1,300.....	758.33	4 draftsmen, at \$1,000 each.....	4,000.00	4 draftsmen, at \$1,000 each.....	4,000
Helphenstine, R. K., jr.....	Clerks, at \$1,300.....	541.67	1 artist.....	1,000.00	1 artist.....	1,000
Rowden, Charles H.....	Clerk, class 1.....	1,200.00	1 photographer.....	1,400.00	1 photographer.....	1,400
Allen, Fannie M.....	Clerk, class 1.....	1,200.00	1 photographer.....	1,200.00	1 photographer.....	1,200
Frost, Edna M.....	Clerk, class 1.....	1,200.00	4 messengers, at \$720 each.....	2,880.00	4 messengers, at \$720 each.....	2,880
Latimer, Mary R.....	Clerk, class 1.....	1,200.00	3 messengers, at \$700 each.....	2,100.00	3 messengers, at \$700 each.....	2,100
Loving, Hamilton I.....	Clerk, class 1.....	1,200.00	3 watchmen, at \$700 each.....	2,100.00	3 watchmen, at \$700 each.....	2,100
Mangan, William J.....	Clerk, class 1.....	1,200.00	1 electrician.....	700.00	1 electrician.....	700
Stoddart, Grace M.....	Clerk, class 1.....	1,200.00	Appropriated for fiscal year 1909 (increase of \$1,100) 144,300.00		Total..... 127,000	
Strause, Florence D.....	Clerk, class 1.....	1,200.00	NOTE.—There is an increase in the salary of 1 clerk from \$1,900 to \$2,000, 1 draftsman from \$1,800 to \$2,000, and 1 clerk of class four has been added, and 1 clerk at \$1,000 has been dropped. Total increase \$1,100.		1 clerk (decrease of 1, dropped as above).....	
Rowden, Charles H.....	Clerks, class 1.....	700.00			1 clerk.....	1,320.00
Stockbridge, Helen E.....	Clerks, class 1.....	500.00			2 clerks, at \$1,200 each.....	2,520.00
Bain, Virginia M.....	Clerk, at \$1,100.....	1,100.00			4 clerks, at \$1,200 each.....	4,800.00
Gage, Charles E.....	Clerk, at \$1,100.....	1,100.00			5 clerks, at \$1,080 each.....	5,400.00
Simonson, Edith.....	Clerk, at \$1,100.....	1,100.00			8 clerks, at \$1,020 each.....	8,160.00
Young, Effie M.....	Clerk, at \$1,100.....	1,100.00			10 clerks, at \$960 each.....	9,600.00
Whittleton, Robert R.....	Clerk, at \$1,100.....	1,053.34			17 clerks, at \$900 each (increase of 5 submitted).....	15,300.00
Koschwitz, Anna P.....	Clerk, at \$1,100.....	1,029.72			4 messengers, at \$660 each.....	2,640.00
Stockbridge, Helen.....	Clerk, at \$1,100.....	641.66			4 messengers, at \$360 each.....	1,440.00
Rector, L. Belle.....	Clerk, at \$1,100.....	458.34			3 watchmen, at \$840 each.....	2,520.00
Bradford, Virginia P.....	Clerk, at \$1,000.....	1,000.00			Total..... 60,200.00	
Echtermann, Martha M.....	Clerk, at \$1,000.....	1,000.00			NOTE 1.—One clerk at \$1,320, 2 clerks at \$1,260 each, 4 clerks at \$1,200 each, 5 clerks at \$1,080 each, 8 clerks at \$1,020 each, 10 clerks at \$960 each, 5 clerks at \$900 each, 4 messengers at \$660 each, 4 messengers at \$360 each, and 3 watchmen at \$340 each have been added, amounting to \$42,900. One hundred and thirty-six places have been dropped as per note above, amounting to \$127,000, making an apparent decrease of \$84,100, but deducting 2 clerks of class four and 1 clerk of class two, aggregating \$5,000, transferred to the Division of Accounts and Disbursements for the purpose of making the administrative examinations of the accounts and disbursements of the Forest Service, the actual decrease is \$79,100. This decrease in the appropriation is made necessary by the change in the organization of the Forest Service, under which 6 administrative districts will be established in the West. This occasions a reduction in the force of clerks in Washington, D. C., as the employees at the headquarters of the administrative districts will be paid from the lump fund for field expenses.	
Enoch, H. H.....	Clerk, at \$1,000.....	1,000.00				
Gill, Sue McLure.....	Clerk, at \$1,000.....	1,000.00				
Moorman, Thomas M.....	Clerk, at \$1,000.....	1,000.00				
Ruppel, Albert.....	Clerk, at \$1,000.....	1,000.00				
Totten, Sarah G.....	Clerk, at \$1,000.....	1,000.00				
Stabler, Elsie B.....	Clerk, at \$1,000.....	975.00				
Conway, Lillian T.....	Clerk, at \$1,000.....	83.33				
Bechtold, Frank E.....	Clerk, at \$1,000.....	916.67				
Brothers, Charles S.....	Clerk, at \$1,000.....	833.33				
McPherson, L. R.....	Clerk, at \$1,000.....	125.00				
Rector, L. Belle.....	Clerk, at \$1,000.....	583.33				
Seaton, S. F.....	Clerk, at \$1,000.....	416.67				
Blackley, Belle B.....	Clerk, at \$900.....	900.00				
Kellerhouse, Lucy C.....	Clerk, at \$900.....	900.00				
McFadden, Stella R.....	Clerk, at \$900.....	900.00				
Morris, Albert.....	Clerk, at \$900.....	900.00				
Mosher, Edith E.....	Clerk, at \$900.....	900.00				
Miller, Mary T.....	Clerk, at \$900.....	825.00				
Gannett, Mary C.....	Clerk, at \$900.....	755.00				
McPherson, L. R.....	Clerk, at \$900.....	787.50				
Love, Clara F.....	Clerk, at \$900.....	112.50				
Seaton, Sarah F.....	Clerk, at \$900.....	525.00				
Meynes, Alice M.....	Clerk, at \$900.....	375.00				
Bechtold, Frank E.....	Clerk, at \$900.....	75.00				
Stewart, Lula.....	Clerk, at \$900.....	825.00				
Brower, Lulu.....	Clerk, at \$900.....	525.00				
Gartrell, L. R.....	Clerk, at \$900.....	375.00				
Wiley, Albert A.....	Clerk, at \$900.....	420.00				
Burnham, Jennie B.....	Clerk, at \$900.....	477.50				
Cunningham, M. V.....	Clerk, at \$800.....	800.00				
Emerson, Nellie E.....	Clerk, at \$800.....	800.00				
Flanagan, Susanna.....	Clerk, at \$800.....	800.00				
Hawkins, Cora J.....	Clerk, at \$800.....	800.00				
Owen, Nina.....	Clerk, at \$800.....	800.00				
Pence, Zula F.....	Clerk, at \$800.....	800.00				
Ramsaur, Sue W.....	Clerk, at \$800.....	800.00				
Rhode, Rosemary.....	Clerk, at \$800.....	800.00				
Rule, Mattie F.....	Clerk, at \$800.....	800.00				
Love, Clara F.....	Clerk, at \$800.....	700.00				
Pegram, Anne Holt.....	Clerk, at \$800.....	100.00				
Sanderlin, Pattie.....	Clerk, at \$800.....	615.54				
Jackson, Leona.....	Clerk, at \$800.....	42.22				
Mac Fate, Elizabeth L.....	Clerk, at \$800.....	600.00				
Huff, Nellie.....	Clerk, at \$800.....	280.80				
Gartrell, Laura R.....	Clerk, at \$800.....	466.66				
Tombs, Ann M.....	Clerk, at \$800.....	333.34				
Meynes, Alice M.....	Clerk, at \$800.....	466.66				
Shelton, Rosalie McK.....	Clerk, at \$800.....	333.34				

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1903.		Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Forest Service, \$143,200—Continued.</i>		<i>Salaries, Forest Service, \$144,300—Continued.</i>	<i>Salaries, Forest Service, \$60,200—Continued.</i>
Pickett, Ruby H.	Clerk, at \$800.....	\$466.66	\$800.00
Davidson, A. B.	Clerk, at \$800.....	333.34	
Childs, Mary M.	Clerk, at \$800.....	431.10	797.77
Holberg, Hilda J.	Clerk, at \$800.....	366.67	
Burnham, Jennie B.	Clerk, at \$800.....	375.55	800.00
Pryor, A. A.	Clerk, at \$800.....	424.45	
Munce, Stella W.	Clerk, at \$800.....	244.44	797.78
Wharton, Georgia E.	Clerk, at \$800.....	553.34	
Stewart, Lula.	Clerk, at \$800.....	66.66	
Rancke, Lillian V.	Translator, at \$800.....	628.89	695.55
Berry, Mabel.	Clerk, at \$700.....		700.00
Hobgood, Mary L.	Clerk, at \$700.....		700.00
Judson, Blanche A.	Clerk, at \$700.....		700.00
Kuntz, Celia B.	Clerk, at \$700.....		700.00
McLaurin, S. L.	Clerk, at \$700.....		700.00
Robinson, Laura J.	Clerk, at \$700.....		700.00
Ruth, Clara.	Clerk, at \$700.....		700.00
Stein, Hattie.	Clerk, at \$700.....		700.00
Taylor, Jennie.	Clerk, at \$700.....		700.00
Williams, Katherine.	Clerk, at \$700.....		700.00
Felder, Hattie E.	Clerk, at \$700.....		698.06
Bowen, Grace L.	Clerk, at \$700.....		612.50
Jackson, Leona.	Clerk, at \$700.....	663.05	700.00
Linell, Ellen M.	Clerk, at \$700.....	36.95	
Pegram, Anne Holt.	Clerk, at \$700.....	612.50	700.00
Joynt, M. L.	Clerk, at \$700.....	87.50	
Hawkins, Anna.	Clerk, at \$700.....	583.33	664.99
Sneed, Anna H.	Clerk, at \$700.....	81.66	
McGregor, Lillian.	Clerk, at \$700.....	525.00	684.44
Krause, L. A.	Clerk, at \$700.....	159.44	
Manderfeld, Bina.	Clerk, at \$700.....	408.33	700.00
O'Toole, Mary.	Clerk, at \$700.....	291.67	
Davidson, Augusta B.	Clerk, at \$700.....	408.33	700.00
Barton, M. A.	Clerk, at \$700.....	291.67	
Tonks, Anne M.	Clerk, at \$700.....	408.33	
Bartmess, Edith H.	Clerk, at \$700.....	233.33	672.78
Zinssmeister, G. M.	Clerk, at \$700.....	31.12	
Shelton, Rosalie McK.	Clerk, at \$700.....	408.33	700.00
Imhoff, Lillie V.	Clerk, at \$700.....	291.67	
Holberg, Hilda J.	Clerk, at \$700.....	379.17	700.01
Kendig, Laura L.	Clerk, at \$700.....	320.84	
Pryor, Ann A.	Clerk, at \$700.....	328.60	700.00
Coale, E. R.	Clerk, at \$700.....	371.40	
Anderson, Marjorie F.	Clerk, at \$700.....	272.22	688.33
Leech, Elizabeth B.	Clerk, at \$700.....	416.11	
De Putron, Edith S.	Clerk, at \$700.....	260.55	690.28
Carman, E. M.	Clerk, at \$700.....	429.73	
Nordeen, Caroline.	Clerk, at \$700.....	260.55	596.94
Goldsmith, G. N.	Clerk, at \$700.....	336.39	
Wharton, Georgia E.	Clerk, at \$700.....	215.83	700.00
O'Leary, Katherine M.	Clerk, at \$700.....	484.17	
Weaning, M. M.	Clerk, at \$700.....	58.33	700.00
Simonson, Marie.	Clerk, at \$700.....	641.67	
Bernhardt, E. J.	Clerk, at \$600.....		600.00
Daniel, Lena A.	Clerk, at \$600.....		600.00
Glase, Cornelia.	Clerk, at \$600.....		600.00
Keating, Edith F.	Clerk, at \$600.....		600.00
Patterson, H. R.	Clerk, at \$600.....		600.00
Pennebaker, Rosa C.	Clerk, at \$600.....		600.00
Riddell, L. G.	Clerk, at \$600.....		600.00
Walton, Janet I.	Clerk, at \$600.....		600.00
Stillwell, Mary S.	Clerk, at \$600.....		591.67
Barton, Mabel A.	Clerk, at \$600.....	350.00	600.00
Steely, Edna V.	Clerk, at \$600.....	250.00	
O'Toole, Mary.	Clerk, at \$600.....	350.00	600.00
Carpenter, Helen F.	Clerk, at \$600.....	250.00	
Imhoff, Lillie V.	Clerk, at \$600.....	340.00	590.00
Anderson, Lottie L.	Clerk, at \$600.....	250.00	
Kendig, Laura L.	Clerk, at \$600.....	325.00	600.00
Miner, Charlotte C.	Clerk, at \$600.....	275.00	
Goldsmith, G. N.	Clerk, at \$600.....	311.67	600.00
Decker, Martha M.	Clerk, at \$600.....	288.33	
Arnold, Mabel.	Clerk, at \$600.....	275.00	600.00
Chappel, E. C.	Clerk, at \$600.....	325.00	
Leech, Elizabeth B.	Clerk, at \$600.....	241.67	600.00
Hoffman, Ethel T.	Clerk, at \$600.....	133.33	
Igoe, Celestine.	Clerk, at \$600.....	225.00	
Carman, Elida M.	Clerk, at \$600.....	231.67	600.00
Dow, Annie M.	Clerk, at \$600.....	368.33	
Simonson, Marie.	Clerk, at \$600.....	50.00	
O'Leary, Katherine M.	Clerk, at \$600.....	135.00	600.00
Eisenstein, Jennie C.	Clerk, at \$600.....	415.00	
Kolb, Charles A.	Draftsman, at \$1,800.....		1,800.00
Witherow, John M.	Draftsman, at \$1,400.....		1,400.00
Taylor, Charles L.	Draftsman, at \$1,400.....		1,400.00
Noel, J. S.	Draftsman, at \$1,200.....		1,200.00
Tripp, Homer F.	Draftsman, at \$1,200.....		1,200.00
Brenizer, Nellie W.	Artist, at \$1,000.....		1,000.00
Noel, Joseph C.	Draftsman, at \$1,000.....		1,000.00
Trembley, Guy T.	Draftsman, at \$1,000.....		1,000.00
Gosorn, Charles B.	Draftsman, at \$1,000.....	83.33	1,000.00
Coleman, T. C.	Draftsman, at \$1,000.....	916.67	
Kettler, Elise.	Draftsman, at \$1,000.....	238.88	1,000.00
Hilton, George.	Draftsman, at \$1,000.....	761.12	
Varela, Arthur G.	Photographer, at \$1,400.....		1,400.00
Shipp, E. S.	Photographer, at \$1,200.....		1,200.00
Blum, Arthur S.	Photographer, at \$1,000.....		1,000.00
Speller, Turner R.	Messenger, at \$720.....		720.00
Stack, John W.	Messenger, at \$720.....		702.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Salaries, Forest Service, \$143,200—Continued.</i>	<i>Salaries, Forest Service, \$144,300—Continued.</i>	<i>Salaries, Forest Service, \$60,200—Continued.</i>
Brown, Henry D. } Messenger, at \$720..... { \$588.00 Sullivan, J. F. } { 132.00 Santucci, Joseph. } Messenger, at \$720..... { 360.00 Ellis, Maude. } { 360.00 Markwood, Wesley. } Messenger, at \$700..... { 700.00 Ellis, Maude. } { 350.00 Goshen, George W. } Messenger, at \$700..... { 175.00 Sullivan, J. F. } { 31.11 Marmion, Bessie. } { 128.34 Marmion, Bessie. } Messenger, at \$600..... { 490.00 Locknane, J. M. } { 110.00 Sullivan, J. F. } Messenger, at \$600..... { 375.00 Sudler, W. L. } { 136.67 Garrett, C. W. } Messenger, at \$600..... { 350.00 Goshen, George W. } Messenger, at \$600..... { 300.00 Queen, Clifford F. } { 133.33 Hickey, J. A. } Messenger, at \$400..... { 166.67 Downey, M. J. } { 91.11 Hoffman, George L. } { 118.89 Sudler, W. L. } Messenger, at \$400..... { 190.00 Munchmeyer, Fred S. } { 91.11 Mansuy, John S. } { 66.66 Locknane, J. M. } Messenger, at \$400..... { 260.01 Spellbring, John A. } { 73.33 Austin, Charles T. } Carpenter, at \$1,000..... { 1,000.00 Flaner, John. } Carpenter, at \$720..... { 540.00 Thies, H. H. W. } { 156.00 Fowler, George V. } Watchman, at \$700..... { 700.00 Walter, William L. } Watchman, at \$700..... { 700.00 Nelson, John E. } Watchman, at \$700..... { 324.72 Fuchs, Robert H. } { 157.50 Lee, Robert E. } Electrician, at \$700..... { 700.00 Total amount paid for salaries..... 141,879.08 Unexpended balance..... 1,320.92 Total amount of appropriation..... 143,200.00		
Distributed as follows:	Distributed as follows:	Distributed as follows:
OFFICE OF THE FORESTER.	OFFICE OF THE FORESTER.	OFFICE OF THE FORESTER.
General administration:	General administration:	General administration:
1 forester..... \$5,000	1 forester..... \$5,000	1 forester..... \$5,000
1 clerk..... 1,800	1 clerk..... 1,800	1 clerk..... 1,260
1 clerk..... 1,200	1 clerk..... 1,200	2 clerks, at \$1,200..... 2,400
Law: 1 clerk..... 700.00	Law: 1 clerk..... 700.00	
Dendrology:	Dendrology:	Information: 2 clerks, at \$900..... 1,800.00
1 clerk..... 1,100	1 clerk..... 1,100	Dendrology:
1 artist..... 1,000	1 artist..... 1,000	1 clerk..... 1,200
1 clerk..... 900	1 clerk..... 900	1 clerk..... 960
1 clerk..... 700	1 clerk..... 700	2 clerks, at \$900..... 1,800
Inspection: 1 clerk..... 3,700.00	Inspection: 1 clerk..... 3,700.00	
		800.00
GRAZING.	GRAZING.	
Administration: 1 clerk..... \$800	Administration: 1 clerk..... \$800	
Control: Permits—	Control: Permits—	
1 clerk..... 1,100	1 clerk..... 1,100	
1 clerk..... 800	1 clerk..... 800	
1 clerk..... 600	1 clerk..... 600	
3,300.00	3,300.00	
SILVICULTURE.	SILVICULTURE.	SILVICULTURE.
Administration: 1 clerk..... 1,100.00	Administration: 1 clerk..... 1,100.00	
Extension: Supervision—	Extension: Supervision—	
1 clerk..... 1,200.00	1 clerk..... 1,200.00	
Silvics: Supervision—1 clerk..... 700.00	Silvics: Supervision—1 clerk..... 700.00	
Library:	Library:	Library:
1 clerk..... \$1,100	1 clerk..... \$1,100	2 clerks, at \$960..... 1,920.00
2 clerks, at \$800..... 1,600	2 clerks, at \$800..... 1,600	
1 clerk..... 700	1 clerk..... 700	
3,400.00	3,400.00	
Management:	Management:	
Timber sales—	Timber sales—	
1 clerk..... 1,700	1 clerk..... 1,700	
1 clerk..... 900	1 clerk..... 900	
1 clerk..... 800	1 clerk..... 800	
2 clerks, at \$600..... 1,200	2 clerks, at \$600..... 1,200	
4,600.00	4,600.00	
Atlas: 1 clerk..... 600.00	Atlas: 1 clerk..... 600.00	
PRODUCTS.	PRODUCTS.	PRODUCTS.
Administration: 1 clerk..... 1,200.00	Administration: 1 clerk..... 1,200.00	Administration: 1 clerk..... 1,260.00
Wood utilization:	Wood utilization:	Wood utilization:
Computation—	Computation—	Computation—
1 clerk..... \$1,000	1 clerk..... \$1,000	1 clerk..... \$1,080
1 clerk..... 800	1 clerk..... 800	2 clerks, at \$1,020..... 2,040
3 clerks, at \$700..... 2,100	3 clerks, at \$700..... 2,100	7 clerks, at \$900..... 6,300
1 clerk..... 600	1 clerk..... 600	
4,500.00	4,500.00	9,420.00
Drafting—	Drafting—	
1 draftsman..... 1,800	1 draftsman..... 2,000	
2 draftsmen, at \$1,400..... 2,800	2 draftsmen, at \$1,400..... 2,800	
2 draftsmen, at \$1,200..... 2,400	2 draftsmen, at \$1,200..... 2,400	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<p><i>Salaries, Forest Service, \$143,200—Continued.</i></p> <p>OPERATION—continued.</p> <p>Maintenance—Continued.</p> <p>Record—Continued.</p> <p>3 watchmen, at \$700..... \$2,100</p> <p>1 electrician..... 700</p> <p>10 clerks, at \$600..... 6,000</p> <p>2 messengers, at \$600..... 1,200</p> <p>3 messengers, at \$400..... 1,200</p> <p>..... \$29,080.00</p> <p>Total amount paid for fiscal year 1908..... 141,879.08</p> <p>Unexpended balance..... 1,320.92</p> <p>Total..... 143,200.00</p> <p><i>Improvement of the National Forests.</i></p> <p>No specific appropriation was made for improvement on the National Forests for the fiscal year 1908, but there was expended during the year for permanent improvement work on the National Forests, \$592,169.19. Payments were made from the appropriations, Administration, etc., Forest Reserves; Administration, etc., National Forests, 1907-8; Administration, etc., National Forests, 1908; and general expenses, Forest Service, 1908.</p> <p>Expenditures were as follows:</p> <p>General supervision of engineering work—</p> <p>Salaries..... \$7,018.64</p> <p>Travel, etc., expenses..... 3,565.93</p> <p>..... \$10,584.57</p> <p>Field supervision, constructing engineers, civil engineers, surveyors, draftsmen, linemen, etc.:</p> <p>Salaries..... \$17,226.08</p> <p>Travel and field expenses..... 12,420.54</p> <p>..... 29,646.62</p> <p>Construction and maintenance of cabins, telephone lines, drift fences, corrals, tanks, roads, trails, bridges, fire lines, and other permanent improvements on the National Forests, \$551,938, as follows:</p>	<p><i>Salaries, Forest Service, \$144,300—Continued.</i></p> <p>OPERATION—continued.</p> <p>Maintenance—Continued.</p> <p>Record—Continued.</p> <p>3 watchmen, at \$700..... \$2,100</p> <p>1 electrician..... 700</p> <p>10 clerks, at \$600..... 6,000</p> <p>2 messengers, at \$600..... 1,200</p> <p>3 messengers, at \$400..... 1,200</p> <p>..... \$29,080.00</p> <p>Total estimate for fiscal year 1909..... 144,300.00</p> <p><i>Improvement of the National Forests, \$600,000.</i></p> <p>Allotted as follows:</p> <p>Salaries in Washington (to November 30, 1908)..... \$2,736.16</p> <p>Salaries out of Washington..... 39,640.68</p> <p>Rent (to November 30, 1908)..... 169.01</p> <p>Field and travel expenses..... 13,574.96</p> <p>Miscellaneous supplies and services..... 543,879.19</p> <p>Total..... 600,000.00</p> <p>Distributed as follows:</p> <p>General supervision (to November 30, 1908)—</p> <p>Salaries..... \$2,736.16</p> <p>Travel and field expenses..... 935.00</p> <p>..... 3,671.16</p> <p>Field supervision (to November 30, 1908)—</p> <p>Salaries..... \$7,860.63</p> <p>Travel, field, and station expenses..... 5,039.96</p> <p>Rent of field headquarters..... 169.01</p> <p>..... 13,069.60</p>	<p><i>Salaries, Forest Service, \$60,200—Continued.</i></p> <p>OPERATION—continued.</p> <p>Estimated for as follows:</p> <p>Miscellaneous supplies and services..... \$974,981.00</p> <p>Distributed as follows:</p> <p>General supervision: (No provision for 1910.)</p> <p>Field supervision: (Provided for by districts under general expenses.)</p>
<p>DISTRICT 1.</p> <p>(Montana, northern Idaho, and northern Wyoming.)</p> <p>Idaho:</p> <p>Bitter Root..... \$10,775.98</p> <p>Coeur d'Alene..... 10,873.83</p> <p>Palouse..... 784.32</p> <p>Priest River (also in Washington)..... 7,560.37</p> <p>Montana:</p> <p>Big Belt..... 4,049.16</p> <p>Big Hole (N.)..... 3,306.59</p> <p>Big Hole (S.) (also in Idaho)..... 2.00</p> <p>Bitter Root (Montana division)..... 7,480.06</p> <p>Cabinet (N.) (also in Idaho)..... 902.93</p> <p>Cabinet (S.)..... 11,256.58</p> <p>Crazy Mountains..... 474.88</p> <p>Elkhorn..... 22.47</p> <p>Gallatin..... 5,936.88</p> <p>Helena..... 9,102.59</p> <p>Hell Gate (E.) and Big Hole..... 5,176.17</p> <p>Highwood Mountains.....</p> <p>Kootenai (also in Idaho)..... 3,558.60</p> <p>Lewis and Clark (N.)..... 3,071.59</p> <p>Lewis and Clark (S.)..... 17,862.22</p> <p>Little Belt and Snowy Mountains..... 7,904.13</p> <p>Little Rockies..... .32</p> <p>Lolo..... 7,369.16</p> <p>Madison..... 4,596.62</p> <p>Missoula..... 1,302.92</p> <p>Otter..... 1,666.31</p> <p>Pryor Mountains..... 657.27</p> <p>Yellowstone (Absaroka division)..... 2,130.08</p> <p>Wyoming:</p> <p>Big Horn..... 1,652.86</p> <p>Yellowstone (Shoshone division)..... 3,375.61</p> <p>Total for District 1..... 132,852.50</p>	<p>DISTRICT 1.</p> <p>(Montana, northeastern Washington, northern Idaho, northern Wyoming, and northwestern South Dakota.)</p> <p>Supervision (December 1, 1908, to June 30, 1909):</p> <p>Salaries..... \$6,125.01</p> <p>Travel and field expenses..... 1,600.00</p> <p>Total..... \$7,725.01</p> <p>Construction, etc., on National Forests:</p> <p>Absaroka..... \$2,942.98</p> <p>Beartooth..... 2,328.80</p> <p>Beaverhead..... 6,012.50</p> <p>Big Horn..... 3,827.03</p> <p>Bitter Root..... 3,830.97</p> <p>Blackfoot..... 6,624.73</p> <p>Cabinet..... 3,368.68</p> <p>Clearwater..... 9,030.19</p> <p>Coeur d'Alene..... 9,089.79</p> <p>Custer..... 1,962.96</p> <p>Deerlodge..... 3,498.41</p> <p>Flathead..... 6,782.73</p> <p>Gallatin..... 2,989.04</p> <p>Helena..... 2,883.74</p> <p>Jefferson..... 3,771.43</p> <p>Kaniksui..... 3,201.79</p> <p>Kootenai..... 5,573.87</p> <p>Lewis and Clark..... 2,826.94</p> <p>Lolo..... 3,926.41</p> <p>Madison..... 3,443.32</p> <p>Missoula..... 4,067.88</p> <p>Nezperce..... 5,765.54</p> <p>Pend Oreille..... 3,663.75</p> <p>Shoshone..... 5,060.53</p> <p>Sioux..... 816.84</p> <p>Contingent fund..... 1,385.14</p> <p>..... 108,675.99</p> <p>Total for District 1..... 116,401.00</p>	<p>DISTRICT 1.</p> <p>(Montana, northeastern Washington, northern Idaho, northern Wyoming, and northwestern South Dakota.)</p> <p>Supervision: (See estimate for appropriation for general expenses.)</p> <p>Construction, etc., on National Forests:</p> <p>Absaroka..... \$4,778.00</p> <p>Beartooth..... 6,285.00</p> <p>Beaverhead..... 9,761.00</p> <p>Big Horn..... 6,200.00</p> <p>Bitter Root..... 8,615.00</p> <p>Blackfoot..... 16,025.00</p> <p>Cabinet..... 8,730.00</p> <p>Clearwater..... 29,660.00</p> <p>Coeur d'Alene..... 10,763.00</p> <p>Custer..... 3,185.00</p> <p>Deerlodge..... 8,842.00</p> <p>Flathead..... 16,490.00</p> <p>Gallatin..... 9,090.00</p> <p>Helena..... 5,005.00</p> <p>Jefferson..... 6,775.00</p> <p>Kaniksui..... 5,155.00</p> <p>Kootenai..... 9,049.00</p> <p>Lewis and Clark..... 9,589.00</p> <p>Lolo..... 6,563.00</p> <p>Madison..... 5,755.00</p> <p>Missoula..... 6,605.00</p> <p>Nezperce..... 16,870.00</p> <p>Pend Oreille..... 5,948.00</p> <p>Shoshone..... 8,095.00</p> <p>Sioux..... 1,326.00</p> <p>Total for District 1..... 225,159.00</p>

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Improvement of the National Forests—Continued.</i>	<i>Improvement of the National Forests, \$600,000—Continued.</i>	<i>Improvement of the National Forests, \$974,981—Continued.</i>
DISTRICT 2.	DISTRICT 2.	DISTRICT 2.
(Colorado southern Wyoming, South Dakota, Nebraska, Kansas, southeastern Montana, and southeastern Utah.)	(Colorado, southern Wyoming, South Dakota, northwestern Minnesota, Nebraska, western Kansas, and southeastern Utah.)	(See 1909 column.)
	Supervision (December 1, 1908, to June 30, 1909):	Supervision: (See estimate for appropriation for general expenses.)
	Salaries..... \$4,725.01	
	Travel and field expenses..... 1,100.00	
	Total..... 5,825.01	
Colorado:	Construction, etc., on National Forests:	Construction, etc., on National Forests:
Battlement Mesa..... \$3,036.30	Arapaho..... \$2,530.27	Arapaho..... \$8,857.00
Cochetopa..... 2,365.84	Battlement..... 2,650.82	Battlement..... 4,303.00
Fruita and Uncompahgre..... 4,907.69	Black Hills..... 3,865.18	Black Hills..... 6,275.00
Gunnison..... 3,577.38	Cheyenne..... 2,053.39	Cheyenne..... 3,333.00
Holy Cross..... 5,476.10	Cochetopa..... 3,064.60	Cochetopa..... 4,965.00
La Sal (also in Utah)..... 452.99	Gunnison..... 3,234.74	Gunnison..... 5,251.00
Las Animas..... 93.35	Hayden..... 1,516.99	Hayden..... 2,462.00
Leadville..... 5,560.82	Holy Cross..... 4,189.59	Holy Cross..... 6,964.00
Medicine Bow (Colorado Division)..... 5,362.97	Kansas..... 382.00	Kansas..... 524.00
Montezuma..... 6,886.53	Las Animas..... 653.37	La Sal..... 2,557.00
Ouray..... 210.20	Leadville..... 3,556.63	Las Animas..... 1,060.00
Park Range..... 3,115.53	Medicine Bow..... 2,201.31	Leadville..... 7,886.00
Pikes Peak..... 12,857.02	Minnesota..... 775.00	Medicine Bow..... 3,736.00
San Isabel..... 1,041.69	Montezuma..... 3,809.78	Minnesotaz..... 1,213.00
San Juan..... 6,217.08	Nebraska..... 1,092.83	Montezuma..... 6,347.00
Wet Mountains..... 658.31	Pike..... 5,689.53	Nebraska..... 3,000.00
White River..... 3,105.31	Rio Grande..... 4,205.59	Pike..... 7,207.00
Kansas: Garden City..... 250.83	Routt..... 3,822.26	Rio Grande..... 6,827.00
Minnesota: Minnesota..... 56.95	San Isabel..... 1,863.70	Routt..... 9,954.00
Montana:	San Juan..... 4,718.13	San Isabel..... 3,025.00
Ekalaka..... 10.71	Sundance..... 645.51	San Juan..... 7,660.00
Long Pine..... 491.87	Uncompahgre..... 3,085.17	Sundance..... 988.00
Nebraska:	White River..... 3,226.23	Uncompahgre..... 5,077.00
Dismal River..... 1,874.71	Contingent fund..... 2,096.43	White River..... 7,237.00
Niobrara..... 4.75		
North Platte..... 2,184.82		
South Dakota:		
Black Hills..... 4,182.81		
Cave Hills, Short Pine, Slim Buttes..... 46.56		
Utah: Monticello..... 416.52		
Wyoming:		
Crow Creek..... 220.52		
Medicine Bow (Wyoming Division)..... 2,451.67		
Sierra Madre..... 1,845.30		
Sundance..... 244.99		
Total for District 2..... 79,208.12	Total for District 2..... 70,755.06	Total for District 2..... 116,708.00
DISTRICT 3.	DISTRICT 3.	DISTRICT 3.
(Arizona, New Mexico, and Oklahoma.)	(See 1908 column.)	(See 1908 column.)
	Supervision (December 1, 1908, to June 30, 1909):	Supervision: (See estimate for appropriation for general expenses.)
	Salaries..... \$3,966.67	
	Travel and field expenses..... 750.00	
	Total..... 4,716.67	
Arizona:	Construction, etc., on National Forests:	Construction, etc., on National Forests:
Baboquivari.....	Alamo..... \$3,570.98	Alamo..... \$5,284.00
Black Mesa (N.)..... \$1,971.84	Apache..... 4,334.26	Apache..... 6,946.00
Black Mesa (S.)..... 1,588.86	Arkansas..... 3,568.75	Arkansas..... 6,093.00
Chiricahua..... 860.32	Carson..... 3,210.02	Carson..... 6,211.00
Draoon..... 630.45	Chiricahua..... 1,550.17	Chiricahua..... 4,616.00
Grand Canyon (S.)..... 889.89	Coconino..... 11,667.42	Coconino..... 18,799.00
Huachuca..... 2,702.57	Coronado..... 3,211.24	Coronado..... 5,213.00
Mount Graham..... 3,514.21	Crook..... 2,422.98	Crook..... 4,258.00
Prescott..... 432.25	Datil..... 3,536.68	Datil..... 9,974.00
San Francisco Mountains..... 7,346.11	Garces..... 2,141.33	Garces..... 3,476.00
Santa Catalina..... 1,980.45	Gila..... 5,948.14	Gila..... 9,509.00
Santa Rita..... 392.75	Jemez..... 3,576.99	Jemez..... 5,280.00
Tonto (N.)..... 2,582.94	Lincoln..... 2,182.51	Lincoln..... 3,218.00
Tonto (S.)..... 712.00	Magdalena..... 2,607.26	Luquillo..... 360.00
Tumacacori..... 713.87	Manzano..... 1,750.97	Magdalena..... 3,120.00
Verde..... 4.00	Ozark..... 3,050.33	Manzano..... 3,167.00
Arkansas:	Pecos..... 1,431.81	Ozark..... 4,992.00
Arkansas..... 46.58	Prescott..... 4,569.09	Pecos..... 2,324.00
Ozark..... 16.04	Sitgreaves..... 2,830.56	Prescott..... 7,905.00
New Mexico:	Tonto..... 6,775.73	Sitgreaves..... 4,595.00
Big Burros..... 350.00	Wichita..... 625.00	Tonto..... 10,000.00
Gallinas..... 27.02	Luquillo..... 219.15	Wichita..... 328.00
Gila (N.)..... 1,996.13	Contingent fund..... 1,180.80	
Gila (S.)..... 5,873.25		
Guadalupe..... 1,621.55		
Jemez..... 6,525.50		
Lincoln..... 2,098.74		
Magdalena..... 530.39		
Manzano and Mount Taylor..... 3,863.51		
Pecos River..... 2,850.34		
Peloncillo..... 247.23		
Sacramento..... 3,902.81		
San Mateo..... 1,793.44		
Taos..... 66.32		
Oklahoma: Wichita..... 2,186.18		
Total for District 3..... 60,817.54	Total for District 3..... 80,986.94	Total for District 3..... 125,668.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Improvement of the National Forests—Continued.</i>	<i>Improvement of the National Forests, \$600,000—Continued.</i>	<i>Improvement of the National Forests, \$974,981—Continued.</i>
DISTRICT 4.	DISTRICT 4.	DISTRICT 4.
(Utah, southern Idaho, western Wyoming, eastern Nevada, and northern Arizona.)	(See 1908 column.)	(See 1908 column.)
Supervision (December 1, 1908, to June 30, 1909):	Supervision (December 1, 1908, to June 30, 1909):	Supervision: (See estimate for appropriation for general expenses.)
Arizona: Grand Canyon (N.).....	Salaries.....	
Idaho:	Travel and field expenses.....	
Bear River.....		
Caribou (also Wyoming).....	Total.....	
Cassia.....	Construction, etc., on National Forests:	
Henrys Lake.....	Ashley.....	
Lemhi (N.).....	Boise.....	
Lemhi (S.).....	Bonneville.....	
Payette.....	Cache.....	
Pocatello.....	Caribou.....	
Port Neuf.....	Challis.....	
Salmon River.....	Dixie.....	
Sawtooth (E.).....	Fillmore.....	
Sawtooth (W.).....	Fishlake.....	
Weiser.....	Humboldt.....	
Yellowstone (Idaho division).....	Idaho.....	
Nevada:	Kaibab.....	
Charleston.....	La Salle.....	
Independence.....	Lemhi.....	
Monitor (Toiyabe, Toquima).....	Manti.....	
Ruby Mountains.....	Minidoka.....	
Vegas.....	Nebo.....	
Utah:	Payette.....	
Aquarius.....	Pocatello.....	
Bear River.....	Powell.....	
Beaver.....	Salmon.....	
Dixie.....	Sawtooth.....	
Fillmore.....	Sevier.....	
Fish Lake.....	Targhee.....	
Glenwood.....	Teton.....	
Grantsville and Vernon.....	Toiyabe.....	
Manti.....	Uinta.....	
Payson.....	Wasatch.....	
Raft River.....	Weiser.....	
Saltlake.....	Wyoming.....	
Sevier.....	Moapa.....	
Uinta (also Wyoming).....	Contingent fund.....	
Wasatch.....		
Wyoming:		
Yellowstone (Teton division).....		
Yellowstone (Wind River division).....		
Total for District 4.....	Total for District 4.....	Total for District 4.....
DISTRICT 5.	DISTRICT 5.	DISTRICT 5.
(California and western Nevada.)	(See 1908 column.)	(See 1908 column.)
Supervision (December 1, 1908, to June 30, 1909):	Supervision (December 1, 1908, to June 30, 1909):	Supervision: (See estimate for appropriation for general expenses.)
Salaries.....	Salaries.....	
Travel and field expenses.....	Travel and field expenses.....	
Total.....	Total.....	
Construction, etc., on National Forests:	Construction, etc., on National Forests:	
California:	Angeles.....	
Diamond Mountain.....	California.....	
Inyo.....	Cleveland.....	
Klamath.....	Inyo.....	
Lassen Peak.....	Klamath.....	
Modoc.....	Lassen.....	
Monterey.....	Modoc.....	
Pinnacles.....	Mono.....	
Plumas.....	Monterey.....	
San Benito.....	Plumas.....	
San Bernardino.....	San Luis.....	
San Gabriel.....	Santa Barbara.....	
San Jacinto.....	Sequoia.....	
San Luis Obispo.....	Shasta.....	
Santa Barbara.....	Sierra.....	
Shasta.....	Stanislaus.....	
Sierra (E.) (with Inyo).....	Tahoe.....	
Sierra (N.).....	Trinity.....	
Sierra (S.).....	Contingent fund.....	
Stanislaus.....		
Stony Creek.....		
Tahoe (also in Nevada).....		
Trabuco Canyon.....		
Trinity.....		
Warner Mountains.....		
Total for District 5.....	Total for District 5.....	Total for District 5.....

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Improvement of the National Forests—Continued.</i>	<i>Improvement of the National Forests, \$600,000—Continued.</i>	<i>Improvement of the National Forests, \$974,981—Continued.</i>
DISTRICT 6. (Washington, Oregon, and Alaska.)	DISTRICT 6. (Washington, Oregon, small portion of northern California, and Alaska.)	DISTRICT 6. (See 1909 column.)
	Supervision (December 1, 1908, to June 30, 1909):	Supervision: (See estimate for appropriation for general expenses.)
	Salaries.....\$6,358.34	
	Travel and field expenses.....1,550.00	
	Total.....7,908.34	
Alaska:	Construction, etc., on National Forests:	Construction, etc., on National Forests:
Alexander Archipelago.....\$44.45	Cascade.....\$6,131.33	Cascade.....\$9,955.00
Tongass.....6.51	Chelan.....6,507.63	Chelan.....11,050.00
Oregon:	Chugach.....2,713.72	Chugach.....5,555.00
Ashland.....1,300.60	Columbia.....3,146.48	Columbia.....5,100.00
Blue Mountains (E.).....2,127.89	Colville.....2,589.42	Colville.....4,690.00
Blue Mountains (Malheur).....89.71	Crater.....3,677.90	Crater.....5,970.00
Blue Mountains (W.).....1,848.72	Deschutes.....4,903.02	Deschutes.....7,955.00
Bull Run.....8.00	Fremont.....3,910.42	Fremont.....6,670.00
Cascade (N.).....4,397.59	Malheur.....3,932.63	Malheur.....6,350.00
Cascade (S.).....11,732.52	Olympic.....5,298.72	Olympic.....8,575.00
Fremont.....4,740.28	Oregon.....5,942.59	Oregon.....9,647.00
Goose Lake.....3,135.32	Rainier.....5,569.88	Rainier.....9,040.00
Heppner.....204.18	Siskiyou.....4,138.70	Siuslaw.....5,255.00
Innaha.....15,589.19	Siuslaw.....3,236.33	Siskiyou.....7,025.00
Siskiyou and Coquille.....10,216.66	Snoqualmie.....3,336.82	Snoqualmie.....5,412.00
Tillamook, Umpqua.....1,171.76	Tongass.....11,153.46	Tongass.....5,820.00
Washington:	Umatilla.....1,828.23	Umatilla.....2,968.00
Colville.....5,236.87	Umpqua.....5,644.31	Umpqua.....9,050.00
Olympic.....4,237.56	Wallowa.....5,308.70	Wallowa.....9,432.00
Washington (Chelan division).....16,317.26	Washington.....4,962.57	Washington.....11,975.00
Washington (W.).....2,625.80	Wenaha.....2,602.74	Wenaha.....5,380.00
Washington (Wenatchee Division).....3,760.30	Wenatchee.....4,580.98	Wenatchee.....13,425.00
Wenaha (also in Oregon).....5,634.59	Whitman.....4,202.73	Whitman.....6,780.00
Rainier.....6,518.83	Contingent fund.....1,749.65	
Total for District 6.....100,944.59	107,068.96	Total for District 6.....173,079.00
	Total for District 6.....114,977.30	
The above amounts were expended in States as follows:	Allotted to States as follows:	Allotted to States as follows:
Alaska.....50.96	Alaska.....13,867.18	Alaska.....11,375.00
Arizona.....28,979.96	Arizona.....43,173.38	Arizona.....69,618.00
Arkansas.....62.62	Arkansas.....6,619.03	Arkansas.....11,085.00
California.....90,515.31	California.....94,524.36	California.....157,975.00
Colorado.....64,925.11	Colorado.....60,452.74	Colorado.....96,356.00
Idaho.....80,942.88	Idaho.....68,399.35	Idaho.....144,541.00
Kansas.....250.83	Kansas.....382.00	Kansas.....524.00
Minnesota.....56.95	Minnesota.....775.00	Minnesota.....1,213.00
Montana.....98,332.11	Montana.....68,037.39	Montana.....141,142.00
Nebraska.....4,064.28	Nebraska.....1,092.83	Nebraska.....3,000.00
Nevada.....3,031.98	Nevada.....8,264.21	Nevada.....13,420.00
New Mexico.....31,746.23	New Mexico.....27,817.36	New Mexico.....48,087.00
Oklahoma.....2,186.18	Oklahoma.....625.00	Oklahoma.....328.00
Oregon.....56,562.42	Oregon.....55,454.63	Oregon.....92,437.00
South Dakota.....4,229.37	Porto Rico.....219.15	Porto Rico.....360.00
Utah.....23,761.60	South Dakota.....4,682.02	South Dakota.....7,601.00
Washington.....44,331.21	Utah.....23,080.55	Utah.....54,538.00
Wyoming.....17,908.00	Washington.....37,210.88	Washington.....69,267.00
	Wyoming.....29,202.08	Wyoming.....52,114.00
Total.....551,938.00	Total.....543,879.19	Grand total.....974,981.00
General supervision, etc.....40,231.19	General supervision, etc.....56,120.81	
Grand total.....592,169.19	Grand total.....600,000.00	
Classified under the following general headings:	Classified under the following general headings (partially estimated):	Classified under the following general headings (estimated):
(1) Construction and repair of ranger stations and forest headquarters.....208,218.20	(1) Construction and repair of ranger stations and forest headquarters.....230,230.09	(1) Construction and repair of ranger stations and forest headquarters.....414,230.00
(2) Construction of telephone lines.....140,860.18	(2) Construction of telephone lines.....71,636.00	(2) Construction of telephone lines.....128,436.00
(3) Construction of drift fences, corrals, tanks, etc.....20,734.35	(3) Construction of drift fences, corrals, tanks, etc.....20,570.10	(3) Construction of drift fences, corrals, tanks, etc.....36,970.00
(4) Road, trail, and bridge construction and repair.....162,772.60	(4) Road, trail, bridge, and fire-lane construction and repair.....199,476.20	(4) Road, trail, bridge, and fire-lane construction and repair.....358,676.00
(5) Clearing and maintaining fire lanes.....5,461.67	(5) Tools and permanent equipment of the forest.....21,966.80	(5) Tools and permanent equipment of the forest.....36,669.00
(6) Tools and permanent equipment of the forests.....13,891.00		
Total.....551,938.00	Total.....543,879.19	Total.....974,981.00
General supervision, etc.....40,231.19	General supervision.....56,120.81	
Grand total.....592,169.19	Grand total.....600,000.00	
Cooperative work, forest investigations, \$23,520.52.	Cooperative work, forest investigations.	Cooperative work, forest investigations.
Expenditures from amounts received and covered into the Treasury as contributions toward cooperative work in forest investigations:	The following is a statement of cooperative funds from July 1, 1908, to December 17, 1908, the date on which this report was prepared:	Approximate estimate.....\$30,000.00
Expended for—	Balance on hand, July 1, 1908.....\$7,906.18	This work being dependent on contributions, no classified and detailed estimate can be made in advance.
Salaries.....\$9,821.70	Contributions received July 1 to December 17, 1908.....13,010.79	
Miscellaneous supplies.....7,022.63	Total.....20,916.97	
Express.....7.25	Expended for cooperative work, July 1 to December 17.....16,106.68	
Freight.....226.22	Unexpended balances refunded to contributors.....128.48	
Travel, station, and field expenses.....5,582.58		
Unexpended balances refunded to contributors.....860.14		
Total.....23,520.52		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>Cooperative work, forest investigations, \$23,520.52—Continued.</i>	<i>Cooperative work, forest investigations—Continued.</i>	<i>Cooperative work, forest investigations—Continued.</i>
Expended for projects as follows:	Balance available December 18, 1908.....	
Planting plans—	\$4,681.81	
Auchincloss.....		
Cleveland Cliffs.....		
Everett.....		
Frick.....		
Mackey.....		
Mead.....		
Miscellaneous.....		
	Total.....	
	20,916.97	
	Additional contributions estimated to June 30, 1909.....	
	11,500.00	
	Total for 1909.....	
	32,416.97	
Planting stations: Princess Furnace.....		
Forest conditions in Kentucky.....		
Forest conditions in Mississippi.....		
Forest conditions in southern Illinois.....		
Forest taxation in New Hampshire.....		
Miscellaneous, office management.....		
Northern Pacific transfer estimate.....		
Preliminary wood-lot examinations.....		
Preliminary examination, C. & N. W. Ry.....		
Preliminary western mill scales.....		
Mine-prop treatments: Bunker Hill and Sullivan Mining Co., Hercules Mining Co., P. & R. C. & I. Co.....		
Southern timber treatment.....		
Telephone pole treatments.....		
Tie treatments.....		
Timber treatments, California Electric Co.....		
Chemical analysis.....		
Pulp woods.....		
Tests of hickory.....		
Timber tests.....		
Fire lines, National Forests.....		
Refunds to contributors, unexpended balances.....		
Total.....		
23,520.52		
<i>Survey and report on Appalachian and White Mountain watersheds, 1908.</i>		
Salaries.....		
Miscellaneous supplies, etc.....		
Travel, station, and field expenses.....		
Unexpended balance, June 30, 1908.....		
Total.....		
24,142.86		
This appropriation was to enable the Secretary of Agriculture to examine, survey, and ascertain the natural conditions of the watersheds at and near the sources of the various rivers having their sources in the Southern Appalachian Mountains and the White Mountains, and to report to Congress the area and natural conditions of said watersheds, the prices at which the same can be purchased, and the advisability of the Government purchasing and setting apart the same as National Forest reserves.		
Eight hundred and fifty-seven dollars and fourteen cents was expended on this work during the fiscal year 1907.		
<i>Refunds to depositors.</i>	<i>Refunds to depositors.</i>	<i>Refunds to depositors.</i>
Excess deposits on account of timber sales, grazing fees, and special-use permits.....	Estimated amount required for 1909.....	Estimated amount required for 1910.....
\$48,678.61	\$50,000.00	\$50,000.00
<i>General expenses of the Forest Service, \$2,678,307.77.</i>	<i>General expenses of the Forest Service, \$3,151,900.</i>	<i>General expenses of the Forest Service, \$4,956,319.</i>
Made up from the following appropriations:		
General expenses, Forest Service, 1908.....		
Administration, etc., Forest Reserves. (Receipts fund, balance June 30, 1907).....		
Administration, etc., National Forests, 1907-8, balance June 30, 1907.....		
Administration, etc., National Forests, 1908.....		
Total.....		
3,519,544.47		
Less—		
(1) Amount expended for permanent improvements. (Detailed for comparative purposes under appropriation "Improvement of the National Forests").....		
\$592,169.19		
(2) Amounts expended from appropriation "Administration, etc., Forest Reserves" on account of fiscal year 1907 liabilities, 10 per cent of receipts returned to States and Uinta Indian refunds.....		
249,067.51		
841,236.70		
Total.....		
2,678,307.77		
(See summary at end of report.)		
Expended as follows:	Allotted as follows:	Allotted as follows:
(1) General expenses:	Salaries in Washington.....	Salaries in Washington.....
Salaries in Washington.....	\$337,082.00	\$290,360.00
Salaries out of Washington.....	1,982,120.00	3,429,292.00
Stationery.....	84,000.00	99,781.00
Miscellaneous services and supplies.....	221,832.00	394,368.00
Furniture and office equipment.....	42,000.00	72,134.00
Fuel.....	1,500.00	4,500.00
Freight.....	7,500.00	10,000.00
Express.....	7,400.00	8,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses of the Forest Service, \$2,678,307.77—Continued.</i>	<i>General expenses of the Forest Service, \$3,151,900—Continued.</i>	<i>General expenses of the Forest Service, \$4,956,319—Continued.</i>
(1) General expenses—Continued.		
Telegraph..... \$5,786.66	Telegraph..... \$7,000.00	Telegraph..... \$10,500.00
Telephone..... 5,176.07	Telephone..... 5,000.00	Telephone..... 9,000.00
Rent..... 53,214.36	Rent..... 70,351.00	Rent..... 84,800.00
Gas and electricity..... 1,144.63	Gas and electricity..... 1,500.00	Gas and electricity..... 4,000.00
Apparatus, laboratory, material, etc..... 31,566.15	Apparatus, etc..... 52,500.00	Apparatus, etc..... 91,378.00
Travel and field expenses..... 274,544.69	Travel and field expenses..... 282,115.00	Travel and field expenses..... 338,600.00
	Contingent..... 50,000.00	Forage..... 59,106.00
Total..... 2,630,483.82	Total of appropriation.. <u>3,151,900.00</u>	Contingent..... 50,000.00
Liabilities outstanding September 30, 1908, estimated..... 35,730.15		Total..... <u>4,956,319.00</u>
Balance to be returned to the Treasury, estimated..... 12,093.80		
Total..... <u>2,678,307.77</u>		
(2) Fiscal year 1907, liabilities, etc.:		
Salaries on National Forests..... 80,166.58		
Returned to States, 10 per cent of receipts from sale of timber, grazing fees, etc.—		
Paid..... \$160,364.60		
Due..... 350.63		
160,715.23		
Paid to Uinta Indians on account of timber sold on the Uinta Reservation..... 8,185.70		
249,067.51		
(3) Permanent improvements:		
Salaries in Washington..... 7,013.64		
Salaries out of Washington..... 17,226.08		
Miscellaneous supplies and services..... 487,952.79		
Travel and field expenses..... 15,986.47		
Advanced to temporary special disbursing agents..... 63,985.21		
592,169.19		
(See appropriation "Improvements on the National Forests.")		
OFFICE OF THE FORESTER.	OFFICE OF THE FORESTER.	OFFICE OF THE FORESTER.
	Projects:	Projects:
	On December 1, 1908, the Forest Service was reorganized and six district headquarters established at Missoula, Mont.; Denver, Colo.; Albuquerque, N. Mex.; Ogden, Utah; San Francisco, Cal., and Portland, Oreg. The following allotments include the amounts allotted to the Washington office in two sections, covering July 1 to November 30 under the old organization and December 1, 1908, to June 30, 1909, under the new. The allotments to the field districts are shown separately:	Washington office, contingent.... \$43,000.00
General administration:	General administration:	General administration:
Salaries..... \$11,104.10	July 1 to November 30—	Salaries..... \$5,500.00
Travel and other expenses..... 3,696.54	Salaries..... \$5,093.64	Travel and field expenses..... 2,400.00
14,800.64	Travel and field expenses..... 1,615.53	7,900.00
	\$6,709.17	
	December 1 to June 30, 1909—	
	Salaries..... \$6,284.70	
	Travel and field expenses..... 1,000.00	
	7,284.70	
	District reorganization:	
	Expenditures in establishing and fitting up district headquarters, shipment of office furniture and supplies, transportation of employees, and other expenses incident to reorganization of the Forest Service effective December 1, 1908..... 40,000.00	
Law. (Advice upon legal questions arising in the administration of the National Forests and in the conduct of other business of the Forest Service; assistance to the Department of the Interior, upon its request, in investigation of claims in National Forests; submission to the Department of Justice of cases of trespass or other offenses against the laws of the United States in National Forests; advice to state officers, forestry associations, etc., upon their request, concerning proposed state forest legislation; collection of state and federal forest laws):	Law (see 1908 column):	Law (see 1908 column):
Salaries..... 12,501.40	July 1 to November 30, 1908:	Salaries..... 15,840.00
Travel and other expenses..... 2,185.52	Salaries..... 8,966.86	Travel and field expenses..... 3,400.00
14,686.92	Travel and field expenses..... 1,176.15	19,240.00
	10,143.01	
	December 1, 1908, to June 30, 1909:	
	Salaries..... 9,415.02	
	Travel and field expenses..... 1,800.00	
	11,215.02	

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses of the Forest Service, \$2,678,307.77—Continued.</i>	<i>General expenses of the Forest Service, \$3,151,900—Continued.</i>	<i>General expenses of the Forest Service, \$4,956,319—Continued.</i>
OFFICE OF THE FORESTER—continued.	OFFICE OF THE FORESTER—continued.	OFFICE OF THE FORESTER—continued.
Information. (The section of information plans the lines along which the Forest Service makes known to the public the practical results of its work, answers requests for material for publication, and prepares statements concerning forests and forest products and their use):	Information (see 1908 column):	Information (see 1908 column):
Salaries..... \$7,438.34	July 1 to November 30—	Salaries..... \$9,600.00
Travel and other expenses..... 1,482.29	Salaries..... 5,392.49	Travel and field expenses..... 900.00
	Travel and field expenses..... 1,050.00	
	6,442.49	10,500.00
	December 1, 1908, to June 30, 1909—	
	Salaries..... 7,991.68	
	Travel and field expenses..... 1,200.00	
	9,191.68	
	Dendrology (see 1908 column):	Dendrology (see 1908 column):
	July 1 to November 30—	
	Salaries..... 5,316.65	Salaries..... 5,400.00
	Travel, field, and station expenses..... 400.00	Travel, field and station expenses..... 1,400.00
	5,716.65	6,800.00
	December 1, 1908, to June 30, 1909—	
	Salaries..... 8,658.35	
	Travel and station expenses.. 650.00	
	9,308.35	
	Inspection (see 1908 column):	Inspection (see 1908 column):
	July 1 to November 30—	(No corresponding allotment by districts for 1910.)
	District 1 (Montana, northeastern Washington, northern Idaho, northern Wyoming, and northwestern South Dakota):	
	Salaries..... 3,654.57	
	Travel, field, and station expenses..... 1,600.00	
	Rent..... 250.00	
	5,504.57	
	District 2, (Colorado, southern Wyoming, South Dakota, Nebraska, Kansas, southeastern Montana, and southeastern Utah):	
	Salaries..... 4,006.98	
	Travel, field, and station expenses..... 2,200.00	
	Rent..... 250.00	
	6,456.98	
	District 3 (Arizona, Arkansas, New Mexico, and Oklahoma):	
	Salaries..... 3,241.66	
	Travel, field, and station expenses..... 1,640.00	
	Rent..... 174.00	
	5,055.66	
	District 4 (see 1908 column):	
	Salaries..... 3,216.66	
	Travel, field, and station expenses..... 993.53	
	Rent..... 200.00	
	4,410.19	
	District 5 (see 1908 column):	
	Salaries..... 4,708.33	
	Travel, field, and station expenses..... 2,140.00	
	Rent..... 275.00	
	7,123.33	
	District 6 (Washington, Oregon, Alaska, and a small part of northern California):	
	Salaries..... 3,473.32	
	Travel, field, and station expenses..... 1,600.00	
	Rent..... 160.00	
	5,233.32	
	General inspection, December 1 to June 30, 1909:	General inspection:
	Salaries..... 4,100.01	Salaries..... \$9,200.00
	Travel, field, and station expenses..... 2,000.00	Travel, field, and station expenses..... 6,000
	6,100.01	15,200.00
APPALACHIAN STUDIES.		
Appalachian studies..... \$81.33		

Forest Service—Continued.

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Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses of the Forest Service, \$2,678,307.77—Continued.</i>	<i>General expenses of the Forest Service, \$3,151,900—Continued.</i>	<i>General expenses of the Forest Service, \$4,956,319—Continued.</i>
OPERATION—continued.	OPERATION—continued.	OPERATION—continued.
Organization. (Charge of the executive force on the National Forests. For administrative purposes the National Forests were grouped in six districts, which corresponded to the inspection districts. This office has direct oversight of personnel, equipment, and expenditures. It also examines all matters of an administrative character prepared in the other offices, and forms the central agency by which the administration of the National Forests by all branches of the Service is brought together and harmonized):	Organization (see 1908 column):	Organization. (No allotment to Washington for 1910.)
Salaries..... \$8,546.53	July 1 to November 30, 1909, only— Salaries..... \$3,317.19	
Travel and field expenses..... 16,927.06	Travel and field expenses..... 8,834.89	
25,473.59	12,152.08	
Engineering. (Expert advice and assistance on the ground in the construction of roads, trails, telephone lines, and other permanent improvements upon National Forests.) (See "Improvement of the National Forests.")	Engineering. (See "Improvement of the National Forests.")	Engineering. (Provided for by districts in 1910.)
Lands. (The office of lands comprised the sections of boundaries, settlement, claims, status, and special uses):	Occupancy. (The office of occupancy from July 1 to November 30 comprised the sections of boundaries, settlement, claims, and special uses. From December 1 to June 30, 1909, it included the section of geology):	Occupancy (see 1909 column):
Supervision—	Supervision (July 1 to November 30, 1908)—	Supervision—
Salaries..... 2,733.33	Salaries..... 2,783.11	Salaries..... \$2,880.00
Travel and field expenses..... 1,217.04	Travel and field expenses..... 1,180.00	Travel and field expenses..... 600.00
3,950.37	3,963.11	3,480.00
	December 1 to June 30, 1909—	
	Salaries..... 4,246.68	
	Travel and field expenses..... 500.00	
	4,746.68	
Boundaries. (The examination of lands for proposed National Forests, for additions to and eliminations from existing National Forests)—	Boundaries (see 1908 column)—	Boundaries—
Salaries..... 22,693.61	July 1 to November 30, 1908, only—	
Travel and field expenses..... 25,374.16	Salaries..... 4,412.07	Salaries..... 1,200.00
48,067.77	Travel and field expenses..... 1,550.00	
	5,962.07	
Settlement. (The handling of agricultural settlement within the National Forests. Examination is made of lands applied for under the act of June 11, 1906, by specially trained men, with a view to the opening to settlement and entry of tracts more valuable for agricultural than National Forest purposes. A large part of this work during this year was performed by men detailed from the section of boundaries.)	Settlement. (see 1908 column)—	Settlement—
Salaries..... 12,901.63	July 1 to November 30, 1908, only—	
Travel and field expenses..... 61.25	Salaries..... 7,111.86	Salaries..... 1,500.00
12,962.88	Travel and field expenses..... 9,855.83	
	16,967.69	
Claims. (The investigation of claims to lands within the National Forests, to determine the natural character of the lands and to assist claimants in perfecting their claims.)	Claims (see 1908 column)—	Claims—
Salaries..... 15,395.36	Salaries..... 10,722.17	Salaries..... 3,720.00
Travel and field expenses..... 13,415.21	Travel and field expenses..... 6,250.00	
28,810.57	16,972.17	
Status. (The examination of the records of the General Land Office to determine the public, State, or private ownership of lands within National Forests.)	Status. (See "Alienation" under office of geography.)	Status. (See Alienation.)
Salaries..... 6,948.62		
Special uses. (The supervision of the granting of permits for the occupancy and use of lands in the National Forests.)	Special uses—	Special uses—
Salaries..... 3,120.27	Salaries..... 1,101.66	Salaries..... 1,620.00
Travel and field expenses..... 242.20		
3,362.47		
Geology. (No allotment for 1908.)	Geology (December 1 to June 30, 1909)—	Geology. (No allotment to Washington office for 1910.)
	Salaries..... 1,599.00	
	Travel and field expenses..... 1,950.00	
	3,549.00	

REPORT OF THE FOREST SERVICE.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses of the Forest Service, \$2,678,307.77—Continued.</i>	<i>General expenses of the Forest Service, \$3,151,900—Continued.</i>	<i>General expenses of the Forest Service, \$4,956,319—Continued.</i>
OPERATION—continued.	OPERATION—continued.	OPERATION—continued.
Geography. (No allotment as an office for 1908.)	Geography. (This office comprised the sections of drafting, photography, atlas, and alienation.)	Geography:
	Supervision—	Supervision—
	July 1 to November 30, 1908—	Salaries..... \$3,520.00
	Salaries..... \$1,416.10	Travel and field expenses..... 1,000.00
	Travel and field expenses..... 900.00	
	2,316.10	4,520.00
	December 1 to June 30, 1909—	
	Salaries..... 1,925.01	
	Travel and field expenses..... 600.00	
	2,525.01	
	Drafting (see 1908 column under office of wood utilization, branch of products)—	Drafting—
	July 1 to November 30, 1908, salaries..... 9,435.50	Salaries..... 10,860.00
	December 1 to June 30, 1909, salaries..... 4,405.04	
	Photography (see 1908 column under office of maintenance, branch of operation)—	Photography—
	July 1 to November 30, 1908, salaries..... 2,030.97	Salaries..... 7,260.00
	December 1 to June 30, 1909—	
	Salaries..... 3,453.36	
	Photographic equipment..... 194.18	
	Photographic supplies..... 14,463.62	
	Atlas. (See 1908 column under office of management, branch of silviculture.)	Atlas—
	July 1 to November 30, 1908, salaries..... 3,559.73	Salaries..... 3,120.00
	December 1 to June 30, 1909—	
	Salaries..... 6,810.03	
	Travel and field expenses..... 500.00	
	Engraving..... 9,000.00	
	16,310.03	
	Alienation (see "Status" in 1908 column under office of lands, branch of operation)—	Alienation—
	July 1 to November 30, 1908, salaries..... 5,239.66	Salaries..... 19,860.00
	December 1 to June 30, 1909, salaries..... 1,021.65	
	Lands (discontinued as branch November 30, 1908) to November 30, 1908, only—	
	Salaries..... 2,199.99	
	Travel and field expenses..... 700.00	
	2,899.99	
GRAZING.	GRAZING.	GRAZING.
(The branch of grazing comprised the offices of control and development.)	(See 1908 column.)	(See 1908 column.)
Administration:	Administration:	Administration:
Salaries..... \$2,865.33	Salaries..... \$6,633.23	Salaries..... \$7,420.00
Travel and field expenses..... 778.00	Travel and field expenses..... 2,500.00	Travel and field expenses..... 2,200.00
3,643.33	9,133.23	9,620.00
(Studies, no allotment for 1908.)	Studies (December 1 to June 30, 1909)—	Studies:
	Salaries..... 6,066.69	Salaries..... 9,160.00
	Travel and field expenses..... 4,800.00	Travel and field expenses..... 4,700.00
	10,866.69	13,860.00
Control (the office of control comprised the sections of allotment, adjustment, and permits):	Control. (July 1 to November 30 only.)	(Allotted by districts.)
Supervision—	Supervision—	
Salaries..... 2,796.67	Salaries..... 1,228.88	
Travel and field expenses..... 727.92	Travel and field expenses..... 125.00	
3,524.59	1,353.88	
Allotment. (The division of the National Forests into grazing districts, the fixing of grazing periods and fees)—	Allotment (July 1 to November 30 only)—	(Allotted by districts.)
Salaries..... 1,900.00	Salaries..... 916.66	
Travel and field expenses..... 1,410.80	Travel and field expenses..... 400.00	(Allotted by districts.)
3,310.80	1,316.66	
Adjustment. (The settlement of controversies over grazing permits and the adjustment of all matters pertaining to grazing trespasses)—	Adjustment (July 1 to November 30 only)—	
Salaries..... 966.66	Salaries..... 666.66	
Travel and field expenses..... 849.79	Travel and field expenses..... 350.00	
1,816.45	1,016.66	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses of the Forest Service, \$2,678,307.77—Continued.</i>	<i>General expenses of the Forest Service, \$3,151,900—Continued.</i>	<i>General expenses of the Forest Service, \$4,956,319—Continued.</i>
GRAZING—continued.	GRAZING—continued.	GRAZING—continued.
Control—Continued.	Control—Continued.	(Allotted by districts.)
Permits. (The conduct of all business relating to grazing permits, amendments, and cancellations, refunds, grazing bonds, and advertisements)—	Permits (July 1 to November 30 only). (See statutory salaries.)	
Salaries..... \$1,063.62		
Travel and field expenses..... 224.76		
1,288.38		
Development. (The office of development comprised the sections of forage and water.)	Development:	(Allotted by districts.)
Supervision—	Supervision (July 1 to November 30 only)—	
Salaries..... 4,265.00	Salaries..... \$948.32	
Travel and field expenses..... 2,589.70		
6,854.70		
Forage. (The study of National Forest forage plants and investigations of best methods for their use)—	Forage (July 1 to November 30 only)—	Forage. (Allotted by districts.)
Salaries..... 5,604.16	Salaries..... \$3,978.31	
Travel and field expenses..... 4,313.38	Travel and field expenses..... 3,000.00	
9,917.54	6,978.31	
Water. (The improvement of springs and natural watering places, construction of windmills, reservoirs, and tanks for stock-watering purposes on National Forests)—	Water (July 1 to November 30 only)—	Water. (Allotted by districts.)
Salaries..... \$1,430.00	Salaries..... \$750.00	
Travel and field expenses..... 1,114.10	Travel and field expenses..... 400.00	
2,544.10	1,150.00	
Fences. (No allotment for 1908.)	Fences (July 1 to November 30 only)—	Fences. (Allotted by districts.)
	Salaries..... \$833.33	
	Travel and field expenses..... 450.00	
	1,283.33	
SILVICULTURE.	SILVICULTURE.	SILVICULTURE.
(The branch of silviculture comprised the offices of management, silvics, and extension.)	(See 1908 column.)	(See 1908 column.)
Administration:	Administration:	Administration (including timber sales):
Salaries..... \$2,974.45	Salaries..... \$5,400.00	Salaries..... \$6,500.00
Travel and field expenses..... 1,258.81	Travel and field expenses..... 1,600.00	Travel and field expenses..... 2,400.00
4,233.26	7,000.00	8,900.00
Management. (The office of management was composed of the sections of timber sales, reconnoissance, state and private cooperation, federal cooperation, and atlas.)	Management. (See 1908 column.)	Management. (No allotment for 1910.)
Supervision—	Supervision (to November 30 only)—	
Salaries..... 5,337.51	Salaries..... 2,483.32	
Travel and field expenses..... 3,119.29	Travel and field expenses..... 350.00	
8,456.80	2,833.32	
Timber sales. (Supervising and assisting local forest officers in disposing of National Forest timber, both under sale and for free use.)	Timber sales (see 1908 column) (to November 30 only)—	Timber sales. (No allotment for 1910.)
Salaries..... 40,038.84	Salaries..... 11,078.93	
Travel and field expenses..... 22,639.06	Travel and field expenses..... 4,500.00	
62,677.90	15,578.93	
Reconnoissance. (Studies to determine how much timber is on the National Forests, and how much may be cut, and under what methods, in order to use their timber resources fully and to maintain an ample future supply.)	Reconnoissance (see 1908 column) (to November 30 only)—	Reconnoissance. (No allotment for 1910.)
Salaries..... 9,324.07	Salaries..... 8,123.28	
Travel and field expenses..... 7,619.20	Travel and field expenses..... 5,500.00	
16,943.27	13,623.28	
	Cooperation (office)—	
	Supervision (July 1 to November 30 only)—	
	Salaries..... 1,925.27	
	Travel and field expenses..... 700.00	
	2,625.27	

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses of the Forest Service, \$2,678,507.77—Continued.</i>	<i>General expenses of the Forest Service, \$3,151,900—Continued.</i>	<i>General expenses of the Forest Service, \$4,958,319—Continued.</i>
SILVICULTURE—continued.	SILVICULTURE—continued.	SILVICULTURE—continued.
Management—Continued. State and private cooperation. (Conduct of studies of forest conditions in cooperation with States, to determine the best forest policy for each State to follow, and of studies for the conservative management of forest lands belonging to States and to private owners.) Salaries.....\$5,855.91 Travel and field expenses.....4,115.06 9,970.97	Management—Continued. State and private cooperation (see 1908 column) (organized into a separate office December 1, 1908)— July 1 to November 30— Salaries.....\$7,095.99 Travel and field expenses.....6,700.00 13,795.99 December 1 to June 30— Salaries.....10,820.06 Travel and field expenses.....7,500.00 18,320.06	Management—Continued. State and private cooperation— Salaries.....\$17,920.00 Travel and field expenses.....3,400.00 21,320.00
Federal cooperation. (Conduct of studies for the conservative management of forest lands under the control of other branches of the Federal Government, and the supervision of lumbering on these lands)— Salaries.....3,363.35 Travel and field expenses.....2,956.03 6,319.38	Federal cooperation (see 1908 column)— July 1 to November 30— Salaries.....10,401.41 Travel and field expenses.....6,500.00 16,901.41 (Organized as separate office December 1, 1908. December 1 to June 30, 1909, salaries and expenses to be paid by Indian Office.) Atlas (see Geography, under branch of operation).	Federal cooperation— Salaries.....7,660.00 Travel and field expenses.....2,800.00 10,460.00
Atlas. (The graphic record, under a comprehensive and uniform system, of all data obtained by the Forest Service and all business done upon National Forests): Salaries.....9,351.67 Travel and field expenses.....6,433.98 15,785.65	Atlas (see Geography, under branch of operation).	Altas (see Geography, under branch of operation).
Silvics. (The office of silvics was composed of the section of field studies, library, and compilation): Supervision, salaries.....1,991.67	Silvics (see 1908 column): Supervision— Salaries.....6,142.86 Travel and field expenses.....2,700.00 8,842.86	Silvics: Supervision— Salaries.....4,560.00 Travel and field expenses.....1,600.00 6,160.00
Field studies. (Investigations of the factors controlling the distribution, rate of growth, and habits of the principal forest trees in the United States, the relation of forests to stream flow and climate, and the conditions necessary to secure natural reforestation of denuded land, in order to furnish information to private timberland owners, on request, and to forest officers)— Salaries.....8,282.56 Travel and field expenses.....5,970.27 14,252.83	Field studies (see 1908 column). (July 1 to November 30 only)— Salaries.....6,459.07 Travel and field expenses.....4,500.00 10,959.07	Field studies. (No allotment for 1910.)
Library. (The maintenance and arrangement for effective use of forest literature comprising the Forest Service library, including the photograph collection. Record of books in branch libraries in the field)— Salaries.....381.93	Library (see 1908 column). (July 1 to November 30 only.) Salaries.....454.98 (Provided for under silvics supervision December 1 to June 30, 1909.) Compilation (see 1908 column). (July 1 to November 30 only)— Salaries.....649.44 Travel and field expenses.....150.00 799.44	Library, salaries.....2,220.00
Compilation. (The assembling and classification of all silvical data obtained by the Forest Service, and the preparation for publication of leaflets describing the distribution, habits, growth, and treatment of important trees)— Salaries.....1,500.00 Travel and field expenses.....307.56 1,807.56	Extension (see 1908 column)— Supervision (July 1 to November 30 only)— Salaries.....241.66 Travel and field expenses.....500.00 741.66	Compilation. (No allotment for 1910.)
Extension. (The office of extension comprised the sections of planting, reconnaissance, and cooperation)— Supervision— Salaries.....2,200.00 Travel and field expenses.....723.22 2,923.22	Planting (see 1908 column). (July 1 to November 30 only)— Salaries.....3,436.59 Travel and field expenses.....2,200.00 5,636.59	Extension. (No allotment for 1910.)
Planting. (The preparation of plans for tree planting and tree-seed sowing on National Forests and the rendering of assistance to local forest officers in carrying them out)— Salaries.....5,649.99 Travel and field expenses.....6,565.60 12,215.59		Planting— Salaries.....3,220.00 Travel and field expenses.....1,000.00 4,220.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses of the Forest Service, \$2,678,307.77—Continued.</i>	<i>General expenses of the Forest Service, \$3,151,900—Continued.</i>	<i>General expenses of the Forest Service, \$4,956,319—Continued.</i>
SILVICULTURE—continued.	SILVICULTURE—continued.	SILVICULTURE—continued.
Silvics—Continued.	Silvics—Continued.	Silvics—Continued.
Extension—Continued.	Extension—Continued.	Extension—Continued.
Reconnaissance. (Field studies in preparation for National Forest planting and sowing; regional studies of the possibility of private forest planting on irrigation projects, in dry-land farming regions, and in eastern States)—	Reconnaissance (see 1908 column). (July 1 to November 30 only)—	Reconnaissance. (No allotment for 1910.)
Salaries..... \$3,266.66	Salaries..... \$2,274.99	
Travel and field expenses..... 2,237.71	Travel and field expenses..... 800.00	
5,504.37	3,074.99	
Cooperation. (Preparation of planting plans in cooperation with private landowners and with other branches of the Federal Government which have control of land needing planting. Assisting, by correspondence, private persons in forest plantations. Experimental planting in cooperation with state educational institutions)—	Cooperation (see 1908 column). (July 1 to November 30 only)—	Cooperation. (No allotment for 1910.)
Salaries..... 5,033.08	Salaries..... 3,602.48	
Travel and field expenses..... 1,651.70	Travel and field expenses..... 1,200.00	
6,734.78	4,802.48	
PRODUCTS.	PRODUCTS.	PRODUCTS.
(Administrative charge of the work, both in Washington and in the field, of the offices of wood utilization, wood preservation, and publication.)	(See 1908 column.)	(See 1908 column.)
Administration:	Administration:	Administration:
Salaries..... \$2,520.84	Salaries..... \$7,594.89	Salaries..... \$7,800.00
Travel and field expenses..... 243.65	Travel and field expenses..... 1,700.00	Travel and field expenses..... 3,000.00
2,764.49	9,294.89	10,800.00
Wood utilization. (The office of wood utilization comprised the section of wood chemistry, turpentine studies, computing, drafting, and wood uses):	Wood utilization (see 1908 column):	Wood utilization (see 1908 column):
Supervision—	Supervision—	Supervision—
Salaries..... 3,996.50	Salaries..... 4,950.00	Salaries..... 4,820.00
Travel and field expenses..... 950.00	Travel and field expenses..... 1,000.00	Travel and field expenses..... 1,400.00
4,946.50	6,050.00	6,220.00
Wood chemistry. (Results of previous work in wood distillation prepared for publication. Field work in preliminary tests of resin and turpentine in Douglas fir. Plans for an improved fractionating still. Experiments on several woods to test their value for pulp. Experiments in cooperation with the Bureau of Plant Industry on the fiber qualities of cornstalks, cotton stalks, flax straw, and other materials. Analyzing the various wood preservatives used in experimental work)—	Wood chemistry (see 1908 column)—	Wood chemistry (see 1908 column)—
Salaries..... 9,727.11	Salaries..... 5,204.98	Salaries..... 2,100.00
Travel and field expenses..... 4,935.13	Travel and field expenses..... 2,415.92	Travel and field expenses..... 800.00
14,662.24	6,620.90	2,900.00
Turpentine studies. (Investigations of the merits of the cup and gutter system of turpentine. Study of the future timber supply for the production of naval stores. Gathering statistics on the annual production of resin and turpentine)—	Turpentine studies (see 1908 column). (Paid from appropriation for "Naval stores industry.")	Turpentine studies (see 1908 column). (No allotment for 1910.)
Salaries..... 900.00		
Station expenses..... 2,805.92		
3,705.92		
Computing. (Working up tables of volume, growth, form, and yield of forest trees. Calculating tests of the strength of timber and miscellaneous compilations)—	Computing (see 1908 column)—	Computing (see 1908 column)—
Salaries..... 7,597.47	Salaries..... 8,216.13	Salaries..... 5,500.00
Travel and field expenses..... 504.24	Travel and field expenses..... 150.00	Travel and field expenses..... 800.00
8,101.71	8,366.13	6,300.00
Drafting. (All classes of drafting work required by the various offices of the Forest Service and for use in the administration of the National Forests)—	Drafting (see Office of Geography, branch of operation).	Drafting (see Office of Geography).
Salaries..... 19,615.99		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses of the Forest Service, \$2,678,307.77—Continued.</i>	<i>General expenses of the Forest Service, \$3,151,900—Continued.</i>	<i>General expenses of the Forest Service, \$4,956,319—Continued.</i>
PRODUCTS—continued.	PRODUCTS—continued.	PRODUCTS—continued.
Wood utilization—Continued.	Wood utilization—Continued.	Wood utilization—Continued.
Wood uses. (Testing commercial timbers in cooperation with Yale University, Purdue University, University of California, and University of Washington. Establishment of a laboratory in cooperation with the University of Colorado. Collecting statistics of forest products in cooperation with the Bureau of the Census.)	Wood uses (see 1908 column)—	Wood uses—
Salaries..... \$27,643.38	Salaries..... \$25,855.73	Salaries..... \$7,960.00
Travel, field, and station expenses..... 12,122.55	Travel, field, and station expenses..... 5,800.00	Travel, field, and station expenses..... 3,600.00
39,765.93	31,655.73	11,560.00
Wood preservation. (The office of wood preservation comprised the section of railroad and mining timbers, National Forest timbers, farm timbers, and research):	Wood preservation (see 1908 column):	Wood preservation:
Supervision—	Supervision—	Supervision—
Salaries..... 5,112.49	Salaries..... 4,891.68	Salaries..... 2,820.00
Travel and field expenses..... 1,224.53	Travel and field expenses..... 950.00	Travel and field expenses..... 800.00
6,337.02	5,841.68	3,620.00
Railroad and mine timbers. (Studies to ascertain the cheapest and most efficient preservatives, processes, and types of plants for the treatment of timbers used by railroads, mining companies, telephone companies, and other consumers of structural timber)—	Railroad and mine timbers (see 1908 column). (July 1 to November 30 only)—	Railroad and mine timbers—
Salaries..... 2,111.04	Salaries..... 1,558.33	Salaries..... 1,700.00
Travel and field expenses..... 3,343.34	Travel, field, and station expenses..... 800.00	Travel and field expenses..... 800.00
5,454.38	2,358.33	2,500.00
National Forest timbers. (Studies to ascertain the most profitable methods for utilizing the timber, both dead and green, on the National Forests, so far as such methods relate to wood preservation; includes experiments to ascertain what classes of timber should be treated and how they can be treated most profitably)—	National Forest timbers (see 1908 column). (July 1 to November 30 only)—	National Forest timbers. (No allotment for 1910.)
Salaries..... 2,093.61	Salaries..... 1,742.48	
Travel and field expenses..... 5,475.26	Travel, field, and station expenses..... 2,700.00	
7,568.87	4,442.48	
Farm timbers. (Studies to ascertain the most practicable methods for the treatment of fence posts, shingles, and other timbers used on the farm)—	Farm timbers (see 1908 column). (July 1 to November 30 only)—	Farm timbers (see 1908 column)—
Salaries..... 4,226.41	Salaries..... 1,480.53	Salaries..... 6,800.00
Travel, field, and station expenses..... 1,387.24	Travel, field, and station expenses..... 250.00	Travel, field, and station expenses..... 3,200.00
5,613.65	1,730.53	10,000.00
Research. (Conducts the purely investigative work of the office. Carries on investigations into the fundamental principles underlying wood preservation. The results are then transferred to the field and tested under more commercial conditions)—	Research (see 1908 column)—	Research. (No allotment for 1910.)
Salaries..... 1,095.83	Salaries..... 2,575.00	
Travel, field, and station expenses..... 5,444.46	Travel, field, and station expenses..... 3,800.00	
6,540.29	5,475.00	
Publication. (Publication comprised the section of articles, education, review, printing, and distribution):	Publication (see 1908 column):	Publication (see 1908 column):
Supervision—	Supervision—	Supervision—
Salaries..... 2,723.06	Salaries..... 1,866.67	Salaries..... 2,820.00
Travel and field expenses..... 561.75	Travel and field expenses..... 650.00	Travel and field expenses..... 400.00
3,284.81	2,516.67	3,220.00
Articles. (The preparation, upon request and without compensation, of special articles giving information upon some phase of forest work, the revision of periodical publications of the service, and the compilation of historical data with regard to forests and forestry. On February 1, 1908, the section of articles was combined with the section of education under the name of the latter)—	Articles. (No allotment for 1909.)	Articles. (No allotment for 1910.)
Salaries..... 2,950.00		
Travel and field expenses..... 261.10		
3,211.10		

Forest Service—Continued.

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Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.				Appropriations for the current fiscal year ending June 30, 1909.				Estimated expenditures for the fiscal year ending June 30, 1910.		
General expenses of the Forest Service, \$2,678,307.77—Continued.				General expenses of the Forest Service, \$3,151,900—Continued.				General expenses of the Forest Service, \$4,956,319—Continued.		
DISTRICT 1—Continued.				DISTRICT 1—Continued.				DISTRICT 1—Continued.		
				SILVICULTURE.				SILVICULTURE.		
Supervision:				Supervision:				Supervision:		
Salaries.....				Salaries.....				Salaries.....		
				\$2,450.01				\$4,620.00		
Travel and field expenses.....				600.00				2,000.00		
				3,050.01				6,620.00		
Timber sales:				Timber sales:				Timber sales:		
Salaries.....				7,091.68				Salaries.....		
				4,150.00				18,120.00		
Travel and field expenses.....				11,241.68				Travel and field expenses.....		
				1,900.01				7,100.00		
				1,900.01				25,220.00		
Planting:				Planting:				Planting:		
Salaries.....				1,400.01				Salaries.....		
				500.00				2,300.00		
Travel and field expenses.....				1,900.01				Travel and field expenses.....		
				1,900.01				800.00		
				1,900.01				3,100.00		
Silvics:				Silvics:				Silvics:		
Salaries.....				1,033.34				Salaries.....		
				650.00				2,200.00		
Travel and field expenses.....				1,683.34				Travel and field expenses.....		
				1,683.34				800.00		
				1,683.34				3,000.00		
GRAZING.				GRAZING.				GRAZING.		
Supervision:				Supervision:				Supervision:		
Salaries.....				3,091.67				Salaries.....		
				550.00				5,160.00		
Travel and field expenses.....				3,641.67				Travel and field expenses.....		
				3,641.67				1,800.00		
				3,641.67				6,960.00		
PRODUCTS.				PRODUCTS.				PRODUCTS.		
Supervision:				Supervision:				Supervision:		
Salaries.....				2,041.68				Salaries.....		
				700.00				3,100.00		
Travel and field expenses.....				2,741.68				Travel and field expenses.....		
				2,741.68				1,600.00		
				2,741.68				4,700.00		
Total for district headquarters.....				Total for district headquarters.....				Total for district headquarters.....		
				64,915.12				147,420.00		
Forests.	Salaries.	Expenses.	Fire.	Forests.	Salaries.	Expenses.	Fire.	Forests.	Salaries.	Expenses.
Idaho:				Absaroka.....	\$9,975.00	\$1,200.00	.....	Absaroka.....	\$17,897.00	\$1,912.00
Bitter Root.....	\$24,539.47	\$1,376.19	.....	Beartooth.....	8,025.00	700.00	.....	Beartooth.....	10,000.00	1,337.00
Coeur d'Alene.....	21,038.09	2,127.93	\$47.50	Beaverhead.....	12,512.50	700.00	.....	Beaverhead.....	20,000.00	1,686.00
Palouse.....	2,504.17	.....	.....	Bighorn.....	17,650.00	1,220.85	\$171.25	Bighorn.....	29,470.00	1,002.00
Priest River.....	9,915.73	1,712.90	88.50	Bitterroot.....	11,025.00	1,175.00	25.35	Bitterroot.....	21,220.00	1,417.00
Montana:				Blackfoot.....	18,836.67	751.27	248.32	Blackfoot.....	27,600.00	2,780.00
Big Belt.....	9,753.06	778.84	.....	Cabinet.....	9,800.00	793.75	3,613.16	Cabinet.....	16,820.00	1,730.00
Big Hole (N.).....	7,928.05	567.81	.....	Clearwater.....	16,775.00	750.00	1,100.47	Clearwater.....	29,170.00	1,155.00
Big Hole (S.).....	2,233.00	65.65	.....	Coeur d'Alene.....	22,431.11	2,075.00	12,729.08	Coeur d'Alene.....	37,420.00	6,056.00
Bitter Root (Montana division).....	13,191.28	858.75	.....	Custer.....	5,083.33	600.00	.....	Custer.....	9,825.00	1,165.00
Cabinet (N.).....	4,413.34	565.87	.....	Deerlodge.....	18,458.33	1,833.00	131.50	Deerlodge.....	26,800.00	3,556.00
Cabinet (S.).....	9,380.06	1,238.87	.50	Flathead.....	15,950.00	1,000.00	114.66	Flathead.....	37,620.00	4,302.00
Crazy Mountains.....	2,192.22	38.48	.....	Gallatin.....	14,950.00	1,500.00	61.27	Gallatin.....	28,870.00	2,104.00
Elkhorn.....	2,321.10	334.45	.....	Helena.....	12,316.67	2,700.00	655.34	Helena.....	24,370.00	2,650.00
Gallatin.....	10,814.17	649.19	.....	Jefferson.....	17,950.00	1,277.10	227.90	Jefferson.....	40,470.00	3,965.00
Helena.....	13,280.01	5,540.34	.....	Kaniksiu.....	9,975.00	1,787.57	3,331.63	Kaniksiu.....	17,470.00	3,200.00
Hell Gate (E.) and Big Hole.....	16,533.48	1,698.32	.....	Kootenai.....	17,608.33	736.40	837.31	Kootenai.....	26,870.00	2,408.00
Highwood Mountains.....	1,865.00	30.09	.....	Lewis and Clark.....	9,100.00	600.00	36.25	Lewis and Clark.....	11,755.00	1,660.00
Kootenai.....	9,536.51	924.69	.....	Lolo.....	12,300.00	900.00	576.82	Lolo.....	17,700.00	1,733.00
Lewis and Clark (N.).....	17,178.90	1,656.25	.....	Madison.....	10,553.33	730.00	.....	Madison.....	20,320.00	1,169.00
Lewis and Clark (S.).....	24,185.44	1,793.35	.....	Missoula.....	10,050.00	1,020.00	18.50	Missoula.....	16,775.00	1,730.00
Little Belt and Snowy Mountains.....	15,644.32	1,629.37	.....	Nezperce.....	8,225.00	600.00	170.22	Nezperce.....	20,500.00	1,913.00
Little Rockies.....	909.45	309.84	.....	Pend Oreille.....	8,000.00	1,313.60	6,003.03	Pend Oreille.....	18,970.00	2,295.00
Lolo.....	7,939.99	777.69	.....	Shoshone.....	13,621.67	1,550.00	55.20	Shoshone.....	21,320.00	2,620.00
Madison.....	9,637.00	435.59	.....	Sioux.....	5,000.00	620.00	.....	Sioux.....	8,925.00	844.00
Missoula.....	1,195.00	77.70	.....	Contingent for fire.....	.....	.....	500.00	Total.....	558,157.00	56,389.00
Otter.....	5,152.50	282.79	.....	Total.....	316,171.94	28,133.54	30,607.26			
Pryor Mountains.....	1,425.00	350.47	.....						
Yellowstone (Absaroka division).....	11,177.49	494.84	14.00							
Wyoming:										
Big Horn.....	15,474.47	676.07	89.65							
Yellowstone (Shoshone division).....	14,350.29	2,053.21	.....						
Total.....	285,708.59	29,045.54	240.15							
SUMMARY.				SUMMARY.				SUMMARY.		
Total for salaries.....	\$285,708.59			Total for salaries.....	\$316,171.94			Total for salaries.....	\$558,157.00	
Total for expenses.....	29,045.54			Total for expenses.....	28,133.54			Total for expenses.....	56,389.00	
Total for fire.....	240.15			Total for fire.....	30,607.26			Total for forests (District 1).....	614,546.00	
Total for forests (District 1).....	314,994.28			Total for forests (District 1).....	374,912.74			Total for district headquarters.....	147,420.00	
				Total for district headquarters.....	64,915.12			Total for district.....	761,966.00	
				Total for district.....	439,827.86					

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses of the Forest Service, \$2,678,307.77—Continued.</i>	<i>General expenses of the Forest Service, \$3,151,900—Continued.</i>	<i>General expenses of the Forest Service, \$4,956,319—Continued.</i>
DISTRICT 2.	DISTRICT 2.	DISTRICT 2.
No allotment by districts in 1908.	Contingent..... \$4,000.00	Contingent..... \$25,000.00
	OFFICE OF THE DISTRICT FORESTER.	OFFICE OF THE DISTRICT FORESTER.
	General administration:	General administration:
	Salaries..... \$3,091.68	Salaries..... \$5,280.00
	Travel and field expenses..... 400.00	Travel and field expenses..... 2,000.00
	3,491.68	7,280.00
	Law:	Law:
	Salaries..... 1,841.67	Salaries..... 2,620.00
	Travel and field expenses..... 975.00	Travel and field expenses..... 600.00
	2,816.67	3,220.00
	Total..... 10,308.35	Total..... 35,500.00
	OPERATION.	OPERATION.
	Supervision:	Supervision:
	Salaries..... \$1,808.34	Salaries..... \$5,480.00
	Travel and field expenses..... 400.00	Travel and field expenses..... 2,000.00
	2,208.34	7,480.00
	Organization:	Organization:
	Salaries..... 525.00	(Provided for under supervision.)
	Travel and field expenses..... 700.00	Maps:
	1,225.00	Salaries..... 4,600.00
		Engineering:
		Salaries..... 5,400.00
		Travel and field expenses..... 2,000.00
		7,400.00
	Occupancy:	Occupancy:
	Salaries..... 7,205.01	Salaries..... 13,860.00
	Travel and field expenses..... 4,650.00	Travel and field expenses..... 5,300.00
	11,855.01	19,160.00
	Accounts:	Accounts:
	Salaries..... 4,368.34	Salaries..... 7,620.00
	Travel and field expenses..... 490.00	
	4,858.34	
	Maintenance:	Maintenance:
	Salaries..... 6,836.67	Salaries..... 5,520.00
	Rent..... 4,130.05	Rent..... 5,000.00
	Supplies..... 700.00	
	Advertising..... 600.00	10,520.00
	Telephone..... 500.00	
	12,766.72	Total..... 56,780.00
	Total..... 32,913.41	
	SILVICULTURE.	SILVICULTURE.
	Supervision:	Supervision:
	Salaries..... \$2,741.67	Salaries..... \$3,920.00
	Travel and field expenses..... 600.00	Travel and field expenses..... 1,800.00
	3,341.67	5,720.00
	Timber sales:	Timber sales:
	Salaries..... 5,050.03	Salaries..... 13,660.00
	Travel and field expenses..... 2,300.00	Travel and field expenses..... 5,600.00
	7,350.00	19,260.00
	Planting:	Planting:
	Salaries..... 1,691.68	Salaries..... 2,800.00
	Travel and field expenses..... 1,050.00	Travel and field expenses..... 800.00
	2,741.68	3,600.00
	Silvics:	Silvics:
	Salaries..... 1,400.00	Salaries..... 2,400.00
	Travel and field expenses..... 1,400.00	Travel and field expenses..... 800.00
	2,800.00	3,200.00
	Total..... 16,233.38	Total..... 31,780.00
	GRAZING.	GRAZING.
	Supervision:	Supervision:
	Salaries..... \$3,336.68	Salaries..... \$5,460.00
	Travel and field expenses..... 550.00	Travel and field expenses..... 1,800.00
	Total..... 3,886.68	Total..... 7,260.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.				Appropriations for the current fiscal year ending June 30, 1909.				Estimated expenditures for the fiscal year ending June 30, 1910.			
General expenses of the Forest Service, \$2,678,307.77—Continued.				General expenses of the Forest Service, \$3,151,900—Continued.				General expenses of the Forest Service, \$4,956,319—Continued.			
DISTRICT 2—Continued.				DISTRICT 2—Continued.				DISTRICT 2—Continued.			
				PRODUCTS.				PRODUCTS.			
				Supervision:				Supervision:			
				Salaries.....				Salaries.....			
				Travel and field expenses.....				Travel and field expenses.....			
				Total.....				Total.....			
				Total for district headquarters.....				Total for district headquarters.....			
Forest.	Salaries.	Expenses.	Fire.	Forest.	Salaries.	Expenses.	Fire.	Forest.	Salaries.	Expenses.	Forest planting.
Colorado:				Arapaho.....	\$8,191.67	\$850.00	\$138.10	Arapaho.....	\$10,750.00	\$1,810.00	
Battlement Mesa.....	\$9,206.38	\$543.24		Battlement Mesa.....	8,500.00	700.00		Battlement Mesa.....	18,300.00	1,500.00	
Cochetopa.....	10,599.73	1,155.40		Black Hills.....	23,091.66	3,400.00	1,207.85	Black Hills.....	40,720.00	3,516.00	
Fruita and Uncompahgre.....	9,700.69	1,169.07		Cheyenne.....	13,150.01	3,676.90	41.94	Cheyenne.....	41,320.00	5,021.00	
Gunnison.....	9,760.82	845.39		Cochetopa.....	8,050.00	800.00		Cochetopa.....	16,020.00	1,475.00	
Holy Cross.....	17,060.40	1,939.84	\$60.29	Gunnison.....	10,775.00	950.00		Gunnison.....	22,100.00	2,703.00	
La Sal.....	633.50	111.57		Hayden.....	7,400.00	845.00		Hayden.....	21,200.00	2,800.00	
Las Animas.....	3,455.00	578.05	94.00	Holy Cross.....	17,225.00	1,541.10	1.20	Holy Cross.....	29,250.00	3,556.00	
Leadville.....	15,555.55	1,755.59	23.50	Kansas.....	2,400.00	2,450.00		Kansas.....	5,425.00	3,220.00	\$9,500.00
Medicine Bow (Colorado Division).....	10,901.39	1,356.67	68.40	Las Animas.....	3,250.00	300.00		La Sal.....	10,850.00	1,750.00	
Montezuma.....	14,301.54	1,605.62		Leadville.....	15,750.00	1,558.20	12.80	Las Animas.....	9,050.00	934.00	
Ouray.....	2,885.00	217.85	12.50	Medicine Bow.....	10,213.34	1,481.80		Leadville.....	29,300.00	2,260.00	
Park Range.....	8,749.46	1,446.15		Minnesota.....	9,500.00	1,000.00	168.11	Medicine Bow.....	19,300.00	1,330.00	
Pikes Peak.....	21,428.53	1,056.46	3,144.53	Montezuma.....	11,616.66	1,100.00		Minnesota.....	18,525.00	5,460.00	
San Isabel.....	5,422.78	452.47	139.95	Nebraska.....	6,050.00	4,000.00		Montezuma.....	22,450.00	2,436.00	
San Juan.....	18,335.60	1,333.22	80.95	Pike.....	22,075.00	3,885.00	40.75	Nebraska.....	13,320.00	3,475.00	10,100.00
Wet Mountains.....	2,794.72	280.15	20.50	Rio Grande.....	15,451.67	1,230.83		Pike.....	39,950.00	4,926.00	9,500.00
White River.....	9,802.50	830.77	401.90	Routt.....	8,183.34	1,125.00		Rio Grande.....	27,600.00	2,352.00	
Kansas: Garden City.....	252.50	1,549.41		San Isabel.....	7,450.00	1,905.00		Routt.....	17,600.00	1,875.00	
Minnesota: Minnesota.....	7,301.68	1,367.09	131.00	San Juan.....	12,125.00	1,000.00		San Isabel.....	17,000.00	1,610.00	
Montana:				Sundance.....	3,200.00	500.00	857.53	San Juan.....	26,100.00	2,615.00	
Ekalaka.....	830.00	275.59		Uncompahgre.....	13,027.50	1,407.25	43.80	Sundance.....	12,800.00	1,588.00	
Long Pine.....	2,862.50	197.57	12.00	White River.....	10,850.00	1,283.45		Uncompahgre.....	28,100.00	3,207.00	
Nebraska:				Contingent for fire.....			500.00	White River.....	19,950.00	1,785.00	
Dismal River.....	2,847.79	4,685.65		Total.....	247,525.85	36,989.53	3,012.08	Total.....	516,980.00	63,204.00	29,100.00
Niobrara.....	870.00	219.16									
North Platte.....	1,801.12	333.23									
South Dakota:											
Black Hills.....	24,974.15	5,959.98	248.15								
Cave Hills, Short Pine, Slim Buttes.....	1,112.33	210.54									
Utah: Monticello.....	3,466.67	311.39									
Wyoming:											
Crow Creek.....	916.67	39.47									
Medicine Bow (Wyo.).....	13,451.93	5,663.31	13.50								
Sierra Madre.....	4,919.72	767.32	35.65								
Sundance.....	2,210.84	281.94									
Total.....	238,411.54	42,539.16	4,486.82								
SUMMARY.				SUMMARY.				SUMMARY.			
Total for salaries.....\$238,411.54				Total for salaries.....\$247,525.85				Total for salaries.....\$516,980.00			
Total for expenses.....42,539.16				Total for expenses.....36,989.53				Total for expenses.....63,204.00			
Total for fire.....4,486.82				Total for fire.....3,012.08				Total for forest planting.....29,100.00			
Total for forests (District 2).....285,437.52				Total for forests (district 2).....287,527.46				Total for forests (district 2).....609,284.00			
				Total for district headquarters.....70,991.86				Total for district headquarters.....141,820.00			
				Total for district.....358,519.32				Total for district.....751,104.00			
DISTRICT 3.				DISTRICT 3.				DISTRICT 3.			
No allotment by districts in 1908.				Contingent.....\$4,000.00				Contingent.....\$25,000.00			
				OFFICE OF THE DISTRICT FORESTER.				OFFICE OF THE DISTRICT FORESTER.			
				General administration:				General administration:			
				Salaries.....\$3,301.68				Salaries.....\$5,220.00			
				Travel and field expenses.....400.00				Travel and field expenses.....2,000.00			
				3,701.68				7,220.00			
				Law:				Law:			
				Salaries.....1,400.00				Salaries.....2,620.00			
				Travel and field expenses.....600.00				Travel and field expenses.....600.00			
				2,000.00				3,220.00			
				Total.....9,701.68				Total.....35,440.00			
				OPERATION.				OPERATION.			
				Supervision:				Supervision:			
				Salaries.....\$1,983.34				Salaries.....\$4,880.00			
				Travel and field expenses.....400.00				Travel and field expenses.....2,000.00			
				2,383.34				6,880.00			

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses of the Forest Service, \$2,678,307.77—Continued.</i>	<i>General expenses of the Forest Service, \$3,151,900—Continued.</i>	<i>General expenses of the Forest Service, \$4,956,319—Continued.</i>
DISTRICT 3—Continued.	DISTRICT 3—Continued.	DISTRICT 3—Continued.
	Organization:	Organization (provided for under supervision).
	Salaries..... \$641.67	
	Travel and field expenses..... 700.00	
	<u>1,341.67</u>	
	Occupancy:	Engineering:
	Salaries..... 9,347.69	Salaries..... \$5,460.00
	Travel and field expenses..... 7,100.00	Travel and field expenses..... 2,000.00
	<u>16,447.69</u>	<u>7,460.00</u>
	Accounts:	Maps:
	Salaries..... 3,966.67	Salaries..... 4,600.00
	Travel and field expenses..... 150.00	
	<u>4,116.67</u>	Occupancy:
	Maintenance:	Salaries..... 15,160.00
	Salaries..... 7,256.68	Travel and field expenses..... 6,100.00
	Rent..... 2,399.04	<u>21,260.00</u>
	Supplies..... 700.00	Accounts:
	Advertising..... 500.00	Salaries..... 7,220.00
	Telephone..... 400.00	
	<u>11,255.72</u>	Maintenance:
	Total..... 35,545.09	Salaries..... 5,400.00
	SILVICULTURE.	Rent, light, heat, and janitor service..... 5,000.00
	Supervision:	<u>10,400.00</u>
	Salaries..... \$2,508.34	Total..... 57,820.00
	Travel and field expenses..... 600.00	
	<u>3,108.34</u>	SILVICULTURE.
	Timber sales:	Supervision:
	Salaries..... 5,075.02	Salaries..... \$4,620.00
	Travel and field expenses..... 2,450.00	Travel and field expenses..... 1,800.00
	<u>7,525.02</u>	<u>6,420.00</u>
	Planting:	Timber sales:
	Salaries..... 2,033.34	Salaries..... 10,460.00
	Travel and field expenses..... 800.00	Travel and field expenses..... 4,100.00
	<u>2,833.34</u>	<u>14,560.00</u>
	Silvics:	Planting:
	Salaries..... 1,633.34	Salaries..... 2,500.00
	Travel and field expenses..... 1,300.00	Travel and field expenses..... 800.00
	<u>2,933.34</u>	<u>3,300.00</u>
	Total..... 16,400.04	Silvics:
	GRAZING.	Salaries..... 2,300.00
	Supervision:	Travel and field expenses..... 800.00
	Salaries..... \$3,243.34	<u>3,100.00</u>
	Travel and field expenses..... 550.00	Total..... 27,380.00
	<u>3,793.34</u>	GRAZING.
	PRODUCTS.	Supervision:
	Supervision:	Salaries..... \$5,580.00
	Salaries..... 1,400.00	Travel and field expenses..... 1,800.00
	Travel and field expenses..... 300.00	<u>7,380.00</u>
	<u>1,700.00</u>	PRODUCTS.
	Total for district headquarters..... 67,140.15	Supervision:
		Salaries..... 3,560.00
		Travel and field expenses..... 1,600.00
		<u>5,160.00</u>
		Total for district headquarters..... 133,180.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses of the Forest Service, \$2,678,307.77—Continued.</i>	<i>General expenses of the Forest Service, \$3,151,900—Continued.</i>	<i>General expenses of the Forest Service, \$4,956,319—Continued.</i>
DISTRICT 4—Continued.	DISTRICT 4—Continued.	DISTRICT 4—Continued.
	Occupancy:	Maps:
	Salaries..... \$6,183.36	Salaries..... \$3,600.00
	Travel and field expenses..... 3,800.00	Engineering:
		Salaries..... 5,400.00
		Travel and field expenses..... 2,000.00
	9,983.36	7,400.00
	Accounts:	Occupancy:
	Salaries..... 4,293.34	Salaries..... 10,660.00
	Travel and field expenses..... 150.00	Travel and field expenses..... 3,700.00
	4,443.34	14,360.00
	Maintenance:	Accounts:
	Salaries..... 6,778.34	Salaries..... 7,420.00
	Rent..... 1,803.20	
	Supplies..... 700.00	Maintenance:
	Advertising..... 700.00	Salaries..... 5,580.00
	Telephone..... 500.00	Rent, light, heat, and janitor serv- ice..... 5,000.00
	10,481.54	10,580.00
	Total..... 28,703.24	Total..... 51,080.00
	SILVICULTURE.	SILVICULTURE.
	Supervision:	Supervision:
	Salaries..... \$2,391.68	Salaries..... \$3,920.00
	Travel and field expenses..... 600.00	Travel and field expenses..... 1,800.00
	2,991.68	5,720.00
	Timber sales:	Timber sales:
	Salaries..... 3,616.68	Salaries..... 8,660.00
	Travel and field expenses..... 1,850.00	Travel and field expenses..... 3,300.00
	5,466.68	11,960.00
	Planting:	Planting:
	Salaries..... 1,900.00	Salaries..... 2,700.00
	Travel and field expenses..... 500.00	Travel and field expenses..... 800.00
	2,400.00	3,500.00
	Silvics:	Silvics:
	Salaries..... 1,208.34	Salaries..... 2,100.00
	Travel and field expenses..... 600.00	Travel and field expenses..... 800.00
	1,808.34	2,900.00
	Total..... 12,666.70	Total..... 24,080.00
	GRAZING.	GRAZING.
	Supervision:	Supervision:
	Salaries..... \$3,791.68	Salaries..... \$8,380.00
	Travel and field expenses..... 600.00	Travel and field expenses..... 2,700.00
	4,391.68	11,080.00
	PRODUCTS.	PRODUCTS.
	Supervision:	Supervision:
	Salaries..... \$1,108.34	Salaries..... \$3,500.00
	Travel and field expenses..... 300.00	Travel and field expenses..... 1,600.00
	1,408.34	5,100.00
	OGDEN SUPPLY DEPOT.	OGDEN SUPPLY DEPOT.
	Maintenance:	Maintenance:
	Salaries..... \$7,676.67	Salaries..... \$17,640.00
	Miscellaneous expenses..... 1,000.00	Rent..... 3,600.00
	Rent..... 1,750.00	Miscellaneous expenses..... 2,000.00
	Registry fees..... 600.00	
	11,026.67	23,240.00
	Property audit: Salaries..... 2,741.67	Total for district head- quarters..... 150,480.00
	13,768.34	
	Total for district head- quarters..... 70,546.65	

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.				Appropriations for the current fiscal year ending June 30, 1909.				Estimated expenditures for the fiscal year ending June 30, 1910.			
General expenses of the Forest Service, \$2,673,307.77—Continued.				General expenses of the Forest Service, \$3,151,900—Continued.				General expenses of the Forest Service, \$4,956,319—Continued.			
DISTRICT 4—Continued.				DISTRICT 4—Continued.				DISTRICT 4—Continued.			
Forest.	Salaries.	Expenses.	Fire.	Forest.	Salaries.	Ex-penses.	Fire.	Forest.	Salaries.	Ex-penses.	Planting stations.
Arizona: Grand Canyon (N.).....	\$6,575.84	\$908.26		Ashley.....	\$6,600.00	\$550.00		Ashley.....	\$12,300.00	\$1,468.00	
Idaho:				Boise.....	14,547.22	2,500.00	\$24.00	Boise.....	24,600.00	2,743.00	
Bear River.....	9,668.35	1,111.07	\$1.50	Bonneville.....	13,350.00	750.00		Bonneville.....	21,700.00	1,680.00	
Caribou.....	7,406.12	623.53		Cache.....	1,400.00	1,001.85		Cache.....	16,300.00	1,580.00	
Cassia.....	3,250.84	119.93		Caribou.....	6,675.00	650.00		Caribou.....	10,050.00	1,342.00	
Henry's Lake.....	11,901.89	690.19		Challis.....	6,000.00	500.00	24.00	Challis.....	11,720.00	3,476.00	
Lemhi (N.).....	1,842.50	105.16		Dixie.....	6,150.00	500.00		Dixie.....	8,250.00	728.00	
Lemhi (S.).....	9,604.05	982.76		Fillmore.....	8,652.00	500.00		Fillmore.....	14,550.00	1,450.00	
Payette.....	8,369.74	1,286.31	178.30	Fish Lake.....	7,580.00	350.00		Fish Lake.....	10,775.00	1,075.00	
Pocatello.....	3,195.00	1,903.36		Humboldt.....	4,650.00	500.00		Humboldt.....	10,700.00	3,009.00	
Port Nuef.....	1,312.50	13.73		Idaho.....	7,500.00	700.00	1,179.37	Idaho.....	13,020.00	1,232.00	
Salmon River.....	11,427.50	1,009.68		Kaibab.....	6,887.00	800.00		Kaibab.....	12,400.00	1,830.00	
Sawtooth (E.).....	5,200.00	671.26		La Salle.....	4,150.01	450.00		Lemhi.....	21,020.00	3,702.00	
Sawtooth (W.).....	24,276.68	3,756.52	94.65	Lemhi.....	9,050.00	800.00		Manti.....	18,500.00	1,778.00	
Weiser.....	15,437.53	1,805.47		Manti.....	10,416.00	750.00	2.85	Minnidoka.....	11,825.00	2,145.00	
Yellowstone (Idaho division).....	5,589.98	102.75	400.00	Minnidoka.....	7,650.00	418.30		Moapa.....	3,450.00	1,423.00	
Nevada:				Moapa.....	1,850.00	600.00		Nebo.....	7,300.00	651.00	
Charleston.....	1,529.73	718.49		Nebo.....	5,016.67	350.00		Payette.....	12,620.00	1,253.00	
Independence.....	2,105.84	227.15		Payette.....	8,100.00	925.00	684.25	Pocatello.....	10,300.00	1,090.00	\$9,400.00
Monitor (Toiyabe, Toquima).....	9,656.10	2,873.01		Pocatello.....	6,841.67	2,163.00		Powell.....	11,200.00	1,120.00	
Ruby Mountains.....	2,197.22	247.65		Powell.....	7,400.00	450.00		Salmon.....	18,700.00	1,320.00	
Vegas.....	123.34	37.70		Salmon.....	11,800.00	600.00	64.40	Sawtooth.....	21,220.00	1,911.00	
Utah:				Sawtooth.....	13,025.00	800.00		Sevier.....	16,100.00	1,518.00	
Aquarius.....	6,143.34	299.88		Sevier.....	9,083.34	539.00		Targhee.....	23,600.00	1,272.00	
Beaver.....	5,153.44	336.76		Targhee.....	15,125.00	1,100.00		Teton.....	22,220.00	1,844.00	
Dixie.....	4,670.17	398.18		Teton.....	11,150.00	500.00		Toiyabe.....	20,120.00	3,435.00	
Fillmore.....	4,357.49	221.98		Toiyabe.....	10,483.34	1,900.00	15.75	Uinta.....	19,720.00	2,504.00	9,600.00
Fish Lake.....	5,757.99	208.59		Uinta.....	15,111.11	1,700.00	1.50	Wasatch.....	10,300.00	4,166.00	15

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses of the Forest Service, \$2,678,307.77—Continued.</i>	<i>General expenses of the Forest Service, \$3,151,900—Continued.</i>	<i>General expenses of the Forest Service, \$4,956,319—Continued.</i>
DISTRICT 5—Continued.	DISTRICT 5—Continued.	DISTRICT 5—Continued.
		Maps: Salaries..... \$3,600.00
		Engineering: Salaries..... 5,460.00 Travel and field expenses..... 2,000.00
		7,460.00
	Occupancy: Salaries..... \$5,577.68 Travel and field expenses..... 4,000.00	Occupancy: Salaries..... 14,060.00 Travel and field expenses..... 5,300.00
	9,577.68	19,360.00
	Accounts: Salaries..... 3,920.00 Travel and field expenses..... 150.00	Accounts: Salaries..... 7,420.00
	4,070.00	
	Maintenance: Salaries..... 6,953.34 Rent..... 4,608.33 Supplies..... 600.00 Advertising..... 600.00 Telephone..... 450.00	Maintenance: Salaries..... 5,700.00 Rent and miscellaneous expenses..... 5,000.00
	13,211.67	10,700.00
	Total..... 30,409.36	Total..... 56,280.00
	SILVICULTURE.	SILVICULTURE.
	Supervision: Salaries..... \$2,660.01 Travel and field expenses..... 600.00	Supervision: Salaries..... \$4,220.00 Travel and field expenses..... 1,800.00
	3,260.01	6,020.00
	Timber sales: Salaries..... 5,716.68 Travel and field expenses..... 2,200.00	Timber sales: Salaries..... 13,760.00 Travel and field expenses..... 5,600.00
	7,916.68	19,360.00
	Planting: Salaries..... 1,950.00 Travel and field expenses..... 900.00	Planting: Salaries..... 2,700.00 Travel and field expenses..... 800.00
	2,850.00	3,500.00
	Silvics: Salaries..... 1,183.34 Travel and field expenses..... 800.00	Silvics: Salaries..... 2,100.00 Travel and field expenses..... 800.00
	1,983.34	2,900.00
	Total..... 16,010.03	Total..... 31,780.00
	GRAZING.	GRAZING.
	Supervision: Salaries..... \$3,500.01 Travel and field expenses..... 550.00	Supervision: Salaries..... \$5,320.00 Travel and field expenses..... 1,800.00
	4,050.01	7,120.00
	PRODUCTS.	PRODUCTS.
	Supervision: Salaries..... 4,783.36 Travel and field expenses..... 1,400.00	Supervision: Salaries..... 8,760.00 Travel and field expenses..... 1,600.00
	6,183.36	10,360.00
	Total for district headquarters..... 67,182.76	Total for district headquarters..... 141,880.00

REPORT OF THE FOREST SERVICE.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.				Appropriations for the current fiscal year ending June 30, 1909.				Estimated expenditures for the fiscal year ending June 30, 1910.			
General expenses of the Forest Service \$2,673,307.77—Continued.				General expenses of the Forest Service, \$3,151,900—Continued.				General expenses of the Forest Service, \$4,956,319—Continued.			
DISTRICT 5—Continued.				DISTRICT 5—Continued.				DISTRICT 5—Continued.			
Forest.	Salaries.	Expenses.	Fire.	Forest.	Salaries.	Ex-penses.	Fire.	Forest.	Salaries.	Ex-penses.	Forest planting.
California:				Angeles.....				Angeles.....			
Diamond Mountains.....	\$10,930.83	\$436.93	.....	California.....	\$36,275.00	\$3,800.00	\$1,160.46	California.....	\$53,600.00	\$3,739.00	\$6,100.00
Inyo.....	7,843.47	1,213.09	\$1.00	Cleveland.....	7,625.00	700.00	977.37	Inyo.....	21,020.00	1,260.00	.....
Klamath.....	17,440.84	1,265.23	28.00	Inyo.....	24,600.28	2,373.99	1,203.29	Klamath.....	18,195.00	2,195.00	.....
Lassen Peak.....	5,685.83	382.64	31.50	Klamath.....	10,750.00	1,180.50	.....	Lassen.....	33,600.00	2,935.00	.....
Modoc.....	3,632.85	366.72	3.14	Lassen.....	18,475.00	1,200.00	1,189.48	Modoc.....	18,100.00	2,270.00	.....
Monterey.....	6,089.00	890.75	.....	Modoc.....	10,150.00	700.00	102.20	Mono.....	16,350.00	1,811.00	.....
Pinnacles.....	1,000.00	47.09	.....	Mono.....	9,120.00	900.00	.....	Monterey.....	4,500.00	860.00	.....
Plumas.....	6,613.06	984.66	60.25	Monterey.....	4,400.00	600.00	53.97	Plumas.....	12,500.00	1,686.00	.....
San Benito.....	574.00	67.99	.....	Plumas.....	6,200.00	900.00	297.76	San Jacinto.....	29,500.00	2,875.00	.....
San Bernardino.....	18,622.20	1,140.70	208.40	San Luis.....	18,600.00	1,480.50	269.38	San Jacinto.....	37,350.00	2,345.00	.....
San Gabriel.....	18,588.61	6,119.26	207.53	Santa Barbara.....	6,750.00	1,200.00	8.00	San Luis.....	13,700.00	1,067.00	.....
San Jacinto.....	19,751.94	1,572.01	708.10	Sequoia.....	31,400.00	1,500.00	324.40	Santa Barbara.....	47,350.00	5,126.00	.....
San Luis Obispo.....	8,073.83	836.69	95.75	Shasta.....	24,183.33	800.00	280.85	Shasta.....	21,120.00	2,883.00	.....
Santa Barbara.....	29,923.86	2,452.41	351.85	Sierra.....	14,150.00	1,200.00	885.95	Sequoia.....	44,300.00	3,355.00	.....
Shasta.....	14,889.79	1,832.72	36.85	Stanislaus.....	29,140.00	1,100.00	503.90	Sierra.....	59,250.00	7,784.00	.....
Sierra (E.) with Inyo.....	.....	.....	.....	Trinity.....	13,249.72	1,046.55	1,078.17	Stanislaus.....	21,820.00	2,743.00	.....
Sierra (N.).....	28,075.91	2,232.87	334.98	Tahoe.....	16,933.34	1,100.00	66.00	Tahoe.....	31,750.00	5,232.00	.....
Sierra (S.).....	24,277.93	1,550.88	64.60	Fire contingent.....	14,675.00	775.00	106.30	Trinity.....	32,050.00	3,914.00	.....
Stanislaus.....	15,543.45	1,693.08	46.25	Total.....	296,676.67	22,556.54	9,007.48	Total.....	516,055.00	54,080.00	6,100.00
Stony Creek.....	7,752.56	620.33	23.80								
Tahoe.....	15,501.04	1,514.64	.....							
Trabuco Canyon.....	3,125.00	128.38	10.70								
Trinity.....	13,768.15	967.42	7.75								
Warner Mountains.....	2,696.52	259.00	.....							
Total.....	280,700.67	28,575.49	2,220.45								
SUMMARY.				SUMMARY.				SUMMARY.			
Total for salaries.....	\$280,700.67			Total for salaries.....	\$296,676.67			Total for salaries.....	\$516,055.00		
Total for expenses.....	28,575.49			Total for expenses.....	22,556.54			Total for expenses.....	54,080.00		
Total for fire.....	2,220.45			Total for fire.....	9,007.48			Total for forest planting.....	6,100.00		
Total for forests (District 5).....	311,496.61			Total for forests (District 5).....	328,240.69			Total for forests (District 5).....	576,235.00		
				Total for district headquarters.....	67,182.76			Total for district headquarters.....	141,880.00		
				Total for district.....	395,423.45			Total for district.....	718,115.00		
DISTRICT 6.				DISTRICT 6.				DISTRICT 6.			
No allotments by districts made in 1908.				Contingent.....	\$4,000.00			Contingent.....	\$25,000.00		
				OFFICE OF THE DISTRICT FORESTER.				OFFICE OF THE DISTRICT FORESTER.			
				General administration:				General administration:			
				Salaries.....	\$3,266.67			Salaries.....	\$5,720.00		
				Travel and field expenses.....	400.00			Travel and field expenses.....	2,000.00		
					3,666.67				7,720.00		
				Law:				Law:			
				Salaries.....	1,750.00			Salaries.....	2,620.00		
				Travel and field expenses.....	600.00			Travel and field expenses.....	600.00		
					2,350.00				3,220.00		
				Total.....	10,016.67			Total.....	35,940.00		
				OPERATION.				OPERATION.			
				Supervision:				Supervision:			
				Salaries.....	\$1,925.01			Salaries.....	\$5,080.00		
				Travel and field expenses.....	400.00			Travel and field expenses.....	2,000.00		
					2,325.01				7,080.00		
				Organization:				Organization: (Provided for under supervision.)			
				Salaries.....	525.00			Maps:			
				Travel and field expenses.....	700.00			Salaries.....	4,600.00		
					1,225.00						
				Occupancy:				Engineering:			
				Salaries.....	6,666.68			Salaries.....	5,400.00		
				Travel and field expenses.....	3,300.00			Travel and field expenses.....	2,000.00		
					9,966.68				7,400.00		
								Occupancy:			
								Salaries.....	18,560.00		
								Travel and field expenses.....	7,700.00		
									26,260.00		

classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses of the Forest Service, \$2,678,307.77—Continued.</i>	<i>General expenses of the Forest Service, \$3,151,900—Continued.</i>	<i>General expenses of the Forest Service, \$4,956,319—Continued.</i>
DISTRICT 6—Continued.	DISTRICT 6—Continued.	DISTRICT 6—Continued.
	Accounts:	Accounts:
	Salaries..... \$3,990.00	Salaries..... \$7,220.00
	Travel and field expenses..... 150.00	
	<u>4,140.00</u>	
	Maintenance:	Maintenance:
	Salaries..... 6,918.34	Salaries..... 5,460.00
	Rent..... 4,057.00	Rent and miscellaneous expenses..... 5,000.00
	Supplies..... 600.00	
	Advertising..... 600.00	<u>10,460.00</u>
	Telephone..... 400.00	
	<u>12,575.34</u>	Total..... <u>63,020.00</u>
	Total..... 30,232.03	
	SILVICULTURE.	SILVICULTURE.
	Supervision:	Supervision:
	Salaries..... \$2,216.68	Salaries..... \$4,220.00
	Travel and field expenses..... 600.00	Travel and field expenses..... 1,800.00
	<u>2,816.68</u>	<u>6,020.00</u>
	Timber sales:	Timber sales:
	Salaries..... 4,200.01	Salaries..... 10,660.00
	Travel and field expenses..... 1,900.00	Travel and field expenses..... 4,100.00
	<u>6,100.01</u>	<u>14,760.00</u>
	Planting:	Planting:
	Salaries..... 700.00	Salaries..... 2,100.00
	Travel and field expenses..... 400.00	Travel and field expenses..... 800.00
	<u>1,100.00</u>	<u>2,900.00</u>
	Silvics:	Silvics:
	Salaries..... 583.34	Salaries..... 2,300.00
	Travel and field expenses..... 400.00	Travel and field expenses..... 800.00
	<u>983.34</u>	<u>3,100.00</u>
	Total..... 11,000.03	Total..... 26,780.00
	GRAZING.	GRAZING.
	Supervision:	Supervision:
	Salaries..... \$3,033.34	Salaries..... \$5,780.00
	Travel and field expenses..... 550.00	Travel and field expenses..... 1,800.00
	<u>3,583.34</u>	<u>7,580.00</u>
	PRODUCTS.	PRODUCTS.
	Supervision:	Supervision:
	Salaries..... 4,491.69	Salaries..... 9,300.00
	Travel and field expenses..... 1,700.00	Travel and field expenses..... 1,600.00
	<u>6,191.69</u>	<u>10,900.00</u>
	Total for district headquarters..... 61,023.76	Total for district headquarters..... 144,220.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.				Appropriations for the current fiscal year ending June 30, 1909.				Estimated expenditures for the fiscal year ending June 30, 1910.		
General expenses of the Forest Service, \$2,678,307.77—Continued.				General expenses of the Forest Service, \$3,151,900—Continued.				General expenses of the Forest Service, \$4,956,319—Continued.		
DISTRICT 6—Continued.				DISTRICT 6—Continued.				DISTRICT 6—Continued.		
Forest.	Salaries.	Expenses.	Fire.	Forest.	Salaries.	Expenses.	Fire.	Forest.	Salaries.	Expenses.
Alaska:				Cascade.....	\$11,000.00	\$1,116.70	\$554.48	Cascade.....	\$20,450.00	\$1,624.00
Alexander Archipelago.....	\$2,650.99	\$2,599.45		Chelan.....	11,050.00	1,200.00	510.19	Chelan.....	28,450.00	3,013.00
Tongass.....	600.00	568.27		Chugach.....	7,665.00	2,750.00		Chugach.....	2,900.00	4,025.00
Chugach.....	625.00	658.73		Columbia.....	6,125.33	810.35		Colville.....	12,850.00	1,481.00
Oregon:				Colville.....	7,850.00	778.95	156.71	Columbia.....	17,645.00	1,390.00
Ashland.....	1,013.05	132.56		Crater.....	11,250.00	900.00	2,441.63	Crater.....	27,200.00	2,270.00
Blue Mountains (E.).....	9,872.62	1,155.52		Deschutes.....	10,104.25	778.75	7,684.14	Deschutes.....	22,850.00	1,292.00
Blue Mountains (Malheur).....	3,667.00	333.44		Fremont.....	11,600.00	900.00	286.54	Fremont.....	24,720.00	1,908.00
Blue Mountains (W.).....	8,895.17	669.47	\$6.50	Malheur.....	6,850.00	700.00	32.25	Malheur.....	16,275.00	1,881.00
Bull Run.....	997.66	1.75		Olympic.....	8,817.00	975.00	92.25	Olympic.....	21,350.00	1,583.00
Cascade (N.).....	18,569.46	1,120.41	17.75	Oregon.....	17,300.00	1,000.00	3,119.72	Oregon.....	28,100.00	1,092.00
Cascade (Umpqua).....	16,524.21	2,261.67	25.24	Rainier.....	11,066.67	900.00	131.00	Rainier.....	25,920.00	2,278.00
Cascade (Manzana).....	2,723.76	438.86		Siskiyou.....	11,625.00	900.00	763.20	Siskiyou.....	24,720.00	1,717.00
Cascade (Willamette).....	2,473.34	283.56		Siuslaw.....	5,420.00	650.00		Siuslaw.....	14,770.00	1,141.00
Fremont.....	9,032.10	935.38		Snoqualmie.....	9,800.00	1,285.60	9.75	Snoqualmie.....	20,100.00	1,664.00
Goose Lake.....	4,453.33	524.08		Tongass (see Chugach).....				Tongass.....	4,800.00	4,684.00
Heppner.....	4,930.00	453.62		Umatilla.....	6,400.00	700.00	15.00	Umatilla.....	8,000.00	1,516.00
Innaha.....	13,381.95	1,222.59		Umpqua.....	11,550.00	1,400.00	178.30	Umpqua.....	20,725.00	1,741.00
Siskiyou and Coquille.....	12,070.55	2,128.20	51.40	Wallowa.....	12,742.00	800.00	23.62	Wallowa.....	24,825.00	2,381.00
Tillamook, Umpqua.....	6,441.12	1,065.91		Washington.....	9,541.67	1,132.00	124.50	Washington.....	20,625.00	1,575.00
Washington:				Wenaha.....	7,350.00	609.50	318.74	Wenaha.....	14,120.00	1,356.00
Colville.....	7,121.95	897.87	2.50	Wenatchee.....	13,350.00	1,000.00	709.41	Wenatchee.....	27,950.00	2,175.00
Olympic.....	8,351.00	739.76	579.09	Whitman.....	10,250.00	1,000.00	64.00	Whitman.....	23,070.00	1,892.00
Washington (Chelan Division).....	9,818.34	1,526.82	25.00	Contingent for fire.....			500.00	Total.....	452,515.00	45,679.00
Washington (W.).....	13,123.61	899.54		Total.....	218,711.92	22,286.85	17,715.43			
Washington (Wenatchee Division).....	9,541.42	1,851.46	8.00							
Wenaha.....	9,940.42	552.00								
Rainier.....	13,532.08	877.74	48.75							
Total.....	190,380.13	23,898.65	764.23							
SUMMARY.				SUMMARY.				SUMMARY.		
Total for salaries.....	\$190,380.13			Total for salaries.....	\$218,711.92			Total for salaries.....	\$452,515.00	
Total for expenses.....	23,898.65			Total for expenses.....	22,286.85			Total for expenses.....	45,679.00	
Total for fire.....	764.23			Total for fire.....	17,715.43			Total for forests (District 6).....	498,194.00	
Total for forests (District 6).....	215,043.01			Total for forests (District 6).....	258,714.20			Total for district headquarters.....	144,220.00	
				Total for district headquarters.....	61,023.76			Total for district.....	642,414.00	
				Total for district.....	319,737.96					
Expended in States as follows:				Allotted to States as follows:				Allotted to States as follows:		
Forest.	Salaries.	Travel, field, and station expenses.	Fire.	Forest.	Salaries.	Travel, field, and station expenses.	Fire.	Forest.	Salaries.	Travel, field, and station expenses.
Alaska.....	\$3,875.99	\$3,826.45		Alaska.....	\$7,665.00	\$2,750.00		Alaska.....	\$7,700.00	\$8,709.00
Arizona.....	104,865.37	11,419.04	\$1,187.17	Arizona.....	118,625.62	10,219.05	\$325.90	Arizona.....	187,430.00	28,384.00
Arkansas.....	7,409.99	618.35	43.20	Arkansas.....	20,820.00	3,242.30	4.30	Arkansas.....	54,290.00	6,516.00
California.....	280,700.67	28,575.49	2,220.45	California.....	296,676.67	22,556.54	8,507.48	California.....	522,155.00	54,080.00
Colorado.....	170,593.64	20,677.51	4,046.52	Colorado.....	182,734.18	21,117.63	236.65	Colorado.....	362,320.00	36,374.00
Idaho.....	176,450.14	19,398.74	414.45	Idaho.....	183,320.00	18,711.02	25,507.64	Idaho.....	332,125.00	39,118.00
Kansas.....	252.50	1,549.41		Kansas.....	2,400.00	2,450.00		Kansas.....	14,925.00	3,220.00
Minnesota.....	7,301.68	1,367.09	131.00	Minnesota.....	9,500.00	1,000.00	168.11	Minnesota.....	18,525.00	5,460.00
Montana.....	201,578.87	21,572.40	26.50	Montana.....	214,494.16	18,216.52	6,546.38	Montana.....	374,912.00	37,304.00
Nebraska.....	5,518.91	5,238.04		Nebraska.....	6,050.00	4,000.00		Nebraska.....	23,420.00	3,475.00
Nevada.....	15,612.23	4,104.00		Nevada.....	16,983.34	3,000.00	15.75	Nevada.....	34,270.00	7,867.00
New Mexico.....	91,989.01	15,903.89	2,108.97	New Mexico.....	92,520.01	12,821.99	574.91	New Mexico.....	196,365.00	24,807.00
Oklahoma.....	3,131.33	985.42	204.16	Oklahoma.....	4,200.00	295.00		Oklahoma.....	5,600.00	441.00
Oregon.....	115,075.32	12,727.01	100.89	Oregon.....	133,446.25	11,454.95	15,481.62	Oregon.....	269,825.00	21,811.00
Porto Rico.....	373.33	382.86		Porto Rico.....				Porto Rico.....	9,200.00	920.00
South Dakota.....	26,086.48	6,170.52	248.15	South Dakota.....	28,091.66	4,020.00	1,207.85	South Dakota.....	49,645.00	4,360.00
Utah.....	83,326.46	8,326.37	2.50	Utah.....	96,334.13	10,540.85	6.35	Utah.....	180,845.00	19,788.00
Washington.....	71,428.82	7,345.19	663.34	Washington.....	77,600.67	8,081.90	1,733.81	Washington.....	176,379.00	13,770.00
Wyoming.....	76,652.20	9,972.45	138.80	Wyoming.....	85,371.68	9,542.75	1,125.92	Wyoming.....	186,030.00	17,635.00
Total.....	1,442,252.94	180,160.23	11,536.10	Total.....	1,576,833.37	164,020.50	64,942.67	Total.....	3,005,961.00	334,039.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1910, etc.—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1908.	Appropriations for the current fiscal year ending June 30, 1909.	Estimated expenditures for the fiscal year ending June 30, 1910.
<i>General expenses of the Forest Service, \$2,678,307.77—Continued.</i>	<i>General expenses of the Forest Service, \$3,151,900—Continued.</i>	<i>General expenses of the Forest Service, \$4,956,319—Continued.</i>
SUMMARY.	SUMMARY.	SUMMARY.
Total for salaries..... \$1,442,252.94	Total for salaries..... \$1,576,833.37	Total for salaries..... \$3,005,961.00
Total for travel, field, and station expenses..... 180,160.23	Total for travel, field, and station expenses..... 164,020.50	Total for travel, field, and station expenses..... 334,039.00
Total for fire..... 11,536.10	Total for fire..... 64,942.67	
Grand total..... 1,633,949.27	Grand total..... 1,805,796.54	Grand total..... 3,340,000.00
<i>Disbursements on National Forests.</i>	<i>Allotments to National Forests.</i>	<i>Allotments to National Forests.</i>
Classified under the following headings:	Classified under the following headings (partially estimated):	Classified under the following headings (estimated):
(1) Salaries of the executive force on the National Forests. \$1,437,205.72	(1) Salaries of the executive force on the National Forests.... \$1,576,833.37	(1) Salaries of the executive force on the National Forests.... \$2,904,532.00
(2) Miscellaneous administrative expenses..... 59,969.46	(2) Miscellaneous administrative expenses..... 19,400.50	(2) Miscellaneous administrative expenses..... 40,440.00
(3) Travel..... 69,070.02	(3) Travel..... 57,778.00	(3) Travel..... 95,856.00
(4) Rent..... 19,468.61	(4) Rent..... 21,853.00	(4) Rent..... 47,500.00
(5) Forest planting, including experiment stations..... 29,056.31	(5) Forest planting..... 20,500.00	(5) Forest planting..... 100,000.00
(6) General office and field equipment..... 7,663.05	(6) General office and field equipment..... 21,900.00	(6) General office and field equipment..... 49,095.00
(7) Fire..... 11,536.10	(7) Special timber work..... 8,273.00	(7) Special timber work..... 24,819.00
	(8) Land examination..... 14,256.00	(8) Land examination..... 42,758.00
	(9) Fire..... 64,942.67	(9) Fire..... 35,000.00
Total..... 1,633,949.27	Total..... 1,805,796.54	Total..... 3,340,000.00
Total expended..... 2,664,213.97	Total allotted..... 3,101,900.00	Total estimated..... 4,956,319.00
Unexpended balance to be returned to the Treasury..... 12,093.80	Foresters, contingent..... 50,600.00	Increase..... 1,894,419.00
Total general expenses..... 2,678,307.77	Total general expenses... 3,151,900.00	Total estimates for the fiscal year 1910..... 6,071,500.00
Total of all appropriations for Forest Service for the fiscal year 1908..... 3,759,086.46	Increase..... 473,592.23	
	Total of all appropriations for the fiscal year 1909..... 3,978,616.97	
RECAPITULATION.		
Total net expenditures for administrative and improvement purposes to September 30, 1908..... 3,380,377.46		
Liabilities, outstanding (estimated)..... 35,730.15		
3,416,107.61		
MISCELLANEOUS EXPENDITURES.		
Paid from cooperative funds..... \$23,520.52		
Paid on 1907 liabilities..... 80,905.68		
Return to States 10 per cent of receipts..... 160,715.23		
Paid to Uinta Indians..... 8,185.70		
Refunds to depositors..... 48,678.61		
322,005.74		
Balances to be returned to the Treasury (estimated)..... 20,973.11		
Total..... 3,759,086.46		

Classified and detailed statement of receipts during the fiscal year ended June 30, 1903 (34 Statutes, p. 1232).

Forest Service—Continued.

State.	Name of National Forest.	Timber sales.	Timber settlement.	Timber trespass.	Grazing.	Special uses.	Gross receipts.	Refunds.	Net receipts.
Alaska.....	Alexander Archipelago and Afognak..	\$4,792.14		\$507.50		\$439.88	\$5,739.52		\$5,739.52
	Chugach.....	425.00		3,471.25			3,896.25		3,896.25
	Tongass.....	1,083.56				20.00	1,103.56		1,103.56
	Total for Alaska.....	6,300.50		3,978.75		459.88	10,739.13		10,739.13
Arizona.....	Baboquivari.....				\$668.11		668.11		668.11
	Black Mesa (north).....	278.09		29.55	9,235.78	233.75	9,797.17	\$367.95	9,429.22
	Black Mesa (south).....	1,025.84		9.17	9,382.29	73.60	10,490.90	118.70	10,372.20
	Chiricahua.....	1,306.93		1.50	1,121.40	14.00	2,443.83	68.53	2,375.30
	Dragoon.....	214.00			467.27		681.27		681.27
	Grand Canyon (north).....	500.00			3,082.20		3,582.20	4.00	3,578.20
	Grand Canyon (south).....	40.50			1,599.25	410.00	2,049.75	37.55	2,012.20
	Huachuca.....	765.00		265.06	3,068.96	43.90	4,142.92		4,142.92
	Mount Graham.....	1,697.31			593.60	92.37	2,383.28	2.00	2,381.28
	Prescott.....	4,192.38			7,484.18	193.65	11,870.21	77.96	11,792.25
	San Francisco Mountains.....	66,409.50	\$50.00	46.80	26,507.13	395.20	93,408.63	150.00	93,258.63
	Santa Catalina.....	52.00		27.00	1,254.77	15.00	1,348.77		1,348.77
	Santa Rita.....	377.00		451.50	2,091.14	7.80	2,927.44	1.00	2,926.44
	Tonto (north).....	292.75			10,804.31	178.80	11,275.86	49.50	11,226.36
	Tonto (south).....	853.25			4,449.46	130.00	5,432.71	51.58	5,381.13
	Tumacacori.....	360.00			1,789.48		2,149.48	3.00	2,146.48
	Verde.....	223.60			6,231.41		6,455.01	84.00	6,371.01
	Total for Arizona.....	78,888.15	50.00	830.58	90,410.74	1,898.07	171,457.54	1,045.77	170,411.77
Arkansas.....	Arkansas.....			1,147.17	18.90	8.50	1,174.57		1,174.57
	Ozark.....			76.40		3.75	80.15		80.15
	Total for Arkansas.....			1,223.57	18.90	12.25	1,254.72		1,254.72
California.....	Diamond Mountain.....	10,414.61		2,045.28	5,376.95	10.00	17,836.84	120.82	17,716.02
	Inyo.....				489.50		489.50		489.50
	Klamath.....	1,473.98		20.54	1,773.00	98.51	3,366.03	178.20	3,187.80
	Lassen Peak.....	144.85	557.84		5,851.14	140.50	6,694.33	341.45	6,352.83
	Modoc.....	82.28		40.25	5,915.20		6,037.78		6,037.78
	Monterey.....			16.50	595.77	6.00	618.27		618.23
	Pinnacles.....				45.00		45.00		45.00
	Piomas.....	17,134.47		377.00	2,536.85	77.00	20,115.32	15.17	20,100.15
	San Benito.....	727.25			255.50		982.75		982.75
	San Bernardino.....	3,372.25	1.04	17.50	1,153.70	8,354.67	12,901.16	53.00	12,848.16
	San Gabriel.....	44.75		3.70	401.80		1,615.75		1,615.75
	San Jacinto.....	60.00		55.00	2,036.29	223.80	2,375.09	41.50	2,333.59
	San Luis Obispo.....				800.45		860.45		860.45
	Santa Barbara.....	243.51	69.90	20.00	5,232.70	862.85	6,428.96	4.00	6,424.96
	Shasta.....	16,884.69	119.03	55.69	4,309.45	67.90	21,427.76	139.35	21,288.41
	Sierra (east).....	3,373.05	194.50	77.80	1,706.70	614.00	6,026.05	79.20	5,946.75
	Sierra (north).....	21,843.10	263.85	46.42	4,430.45	298.00	26,881.82	3,154.48	23,697.34
	Sierra (south).....	3,017.49	496.00		11,283.20	2,127.64	16,924.33	838.07	16,086.26
	Stanislaus.....	2,229.77	459.12	2,508.81	13,457.30	1,100.20	19,735.20	270.31	19,464.89
	Stony Creek.....	198.74		227.83	7,356.10	50.00	7,832.67	41.68	7,790.99
	Tahoe.....	8,125.23	95.00	6,326.44	8,499.27	2,345.50	25,391.44	506.13	24,885.31
	Trabuco Canyon.....	50.00		27.00	401.25	200.30	678.55		678.55
	Trinity.....	85.00	54.15		4,151.15	144.00	4,430.30	550.53	3,903.77
	Warner Mountains.....	1,510.81	20.00		4,825.62	69.40	6,426.83	11.00	6,415.83
	Total for California.....	90,996.83	2,321.43	11,865.76	92,966.34	17,955.77	216,106.13	6,354.99	209,751.14
Colorado.....	Battlement Mesa.....	1,286.65	112.60	26.32	5,421.60	145.30	9,992.47	23.00	9,969.47
	Cochetopa.....	5,107.70		322.24	9,232.95	4.00	14,686.89	19.92	14,666.97
	Fruita.....				18.80		18.80		18.80
	Gunnison.....	3,986.40		271.44	3,873.40	55.90	8,187.14	745.53	7,441.61
	Holy Cross.....	18,270.87	361.65	220.80	3,832.95	116.00	22,802.30	350.22	22,452.08
	La Sal.....	12.50			222.40		234.90		234.90
	Las Animas.....	226.29		247.74	553.40		1,027.43		1,027.43
	Leadville.....	10,190.64	80.29	331.90	9,607.56	130.00	20,290.39	493.49	19,796.90
	Medicine Bow (Colorado division).....	9,262.86	748.96	45.48	2,156.90	290.24	12,604.44	116.24	12,488.20
	Montezuma.....	8,271.44	6.55	6,553.49	10,937.57	88.25	25,857.30	730.73	25,126.57
	Ouray.....	866.81		608.87	2,192.10	20.00	3,687.78		3,687.78
	Park Range.....	2,782.30		359.82	4,890.28	293.34	8,325.74	57.74	8,268.00
	Pikes Peak.....	17,185.21		712.02	5,890.73	953.80	24,741.76	1,525.32	23,216.44
	San Isabel.....	1,174.89	8.75	10.37	1,579.23	17.65	2,790.89	13.25	2,777.64
	San Juan.....	3,839.99		22.67	22,721.68	227.45	26,831.79	274.72	26,557.07
	Uncompahgre.....	2,142.07		490.00	10,253.45	27.30	12,912.82	85.00	12,827.82
	Wet Mountains.....	770.00		65.00	1,921.53	8.00	2,704.59	79.42	2,625.17
	White River.....	3,898.02		10.00	6,903.30	41.50	10,852.82	270.00	10,582.82
	Total for Colorado.....	89,294.70	1,268.83	10,298.16	105,229.83	2,518.73	208,610.25	4,787.58	203,822.67
Idaho.....	Bear River.....	5,481.91		286.20	10,278.65	14.00	16,000.76	199.01	15,801.75
	Big Hole (south).....				1,347.45		1,347.45		1,347.45
	Bitterroot.....	471.88			1,997.20	102.70	2,571.78	50.00	2,521.78
	Cabinet (north).....								
	Caribou.....	589.00			23,564.45	10.00	24,163.45	778.10	23,385.35
	Cassia.....	30.45			5,111.35	7.78	5,149.58	304.00	4,845.58
	Coeur d'Alene.....	23,704.13	136.90	2,197.12	57.00	440.00	26,535.15	1,551.61	24,983.54
	Henry's Lake.....	11,766.97	501.46		9,410.82	42.40	22,021.65	351.34	21,670.31
	Kootenai.....	40.00		344.18	54.00	11.39	449.57		449.57
	Lemhi.....	1,764.43		430.70	7,921.34	1.00	10,117.47	68.75	10,048.72
	Palouse.....			400.00	1,219.80		1,619.80		1,619.80
	Payette.....	76.90			10,710.60	75.00	10,862.50	86.00	10,776.50
	Pocatello.....	5.00			58.30		63.30		63.30
	Port Neuf.....	50.00		12.40	2,514.69	10.00	2,587.09		2,587.09
	Priest River.....	1.90			24.60	5.00	31.50	31.50	
	Raft River.....	862.00			2,763.62	10.00	3,635.62	6.65	3,628.97
	Salmon River.....	2,915.67	25.00	551.25	2,864.35	2.00	6,355.27	393.00	5,962.27
	Sawtooth (east).....	1,253.98			28,877.15	1.00	30,132.13	19.50	30,112.63
	Sawtooth (west).....	24,106.15		152.00	15,798.97	131.75	40,188.87	1,464.85	38,724.02
	Weiser.....	3,045.27		65.97	14,896.06	127.00	18,134.30	450.20	17,684.10
	Yellowstone (Idaho division).....	1,017.74	8.60	6.90	7,922.38		8,955.62		8,955.62
	Total for Idaho.....	77,183.38	971.96	4,446.72	147,392.78	991.02	230,985.86	5,754.51	225,231.35

Classified and detailed statement of receipts during the fiscal year ended June 30, 1908 (34 Statutes, p. 1232)—Continued.

Forest Service—Continued.

State.	Name of National Forest.	Timber sales.	Timber settlement.	Timber trespass.	Grazing.	Special uses.	Gross receipts.	Refunds.	Net receipts.
Kansas.....	Kansas.....				\$2,574.20		\$2,574.20		\$2,574.20
Minnesota.....	Minnesota.....								
Montana.....	Big Belt.....	\$7,162.91		\$96.37	10,815.80	\$394.00	18,469.08	\$50.00	18,419.08
	Big Hole (Anaconda division).....	100.00				30.00	130.00		130.00
	Big Hole (north).....	1,955.30		155.00	6,552.50	66.35	8,729.15	720.00	8,009.15
	Big Hole (south).....	44.75			7,965.30		8,010.05		8,010.05
	Bitter Root (Montana division).....	51,127.37	\$8,009.30	184.37	44.00	120.00	59,485.04	100.00	59,385.04
	Cabinet (north).....			36.45			36.45		36.45
	Cabinet (south).....	600.60		611.30	134.40	17.00	1,363.30		1,363.30
	Crazy Mountains.....	1,309.72		236.50	5,557.77	30.00	7,133.99		7,133.99
	Ekalaka.....	628.74			491.90	10.75	1,131.59	3.00	1,128.59
	Elkhorn.....	1,042.10			1,732.80	20.00	2,794.90	207.75	2,587.15
	Gallatin.....	3,723.67		893.50	3,815.25	23.50	8,455.92	360.90	8,095.02
	Helena.....	16,325.20		1,734.67	5,968.01	163.04	24,190.92	98.95	24,091.97
	Hell Gate (east).....	28,568.00		387.28	5,030.52	216.50	34,202.30	559.23	33,643.07
	Hell Gate (west).....	47.50		12.00	812.80	8.00	880.30		880.30
	Highwood Mountains.....				1,275.25	2.50	1,277.75		1,277.75
	Kootenai.....			39.42	6.00	2.00	47.42		47.42
	Lewis and Clark (north).....	16,934.35		73.64	136.25	110.80	17,255.04	35.49	17,219.55
	Lewis and Clark (south).....	40,307.09		97.50	1,771.80	79.75	42,256.14	204.75	42,051.39
	Little Belt.....	6,694.61		259.08	6,812.78	88.30	13,854.77	310.03	13,544.74
	Little Rockies.....	1,172.24		559.41			1,731.65	2.00	1,729.65
	Lolo.....	4,907.35	275.00	2,060.16	88.20	19.00	7,349.71		7,349.71
	Long Pine.....	2,516.26			941.50	335.50	3,793.26	25.95	3,767.31
	Madison.....	730.93	1,983.30	1.25	10,177.46	217.10	13,110.04	10.00	13,100.04
	Missoula.....	72.00			2.55	3.00	77.55		77.55
	Otter.....	246.50		314.34	9,166.40	12.00	9,739.24	4.18	9,735.06
	Pryor Mountains.....	1,011.52		523.95	1,722.75	16.50	3,274.72	458.89	2,815.83
	Snowy Mountains.....	2,829.17		321.03	728.35		3,876.55	1.25	3,875.30
	Yellowstone (Absaroka division).....	9,127.31		241.12	5,556.45	186.40	15,111.28	1,385.90	13,725.38
	Total for Montana.....	199,185.19	10,267.60	8,838.34	87,304.79	2,171.99	307,767.91	4,538.27	303,229.64
Nebraska.....	Dismal River.....				446.05		446.05	40.00	406.05
	Niobrara.....				1,410.60		1,410.60		1,410.60
	North Platte.....				7,582.49		7,582.45		7,582.45
	Total for Nebraska.....				9,439.10		9,439.10	40.00	9,399.10
Nevada.....	Independence.....	31.75			4,544.15	12.80	4,588.70	1,431.57	3,157.13
	Monitor.....	308.60		1,150.20	1,919.75		3,377.95	651.76	2,726.19
	Ruby Mountains.....				5,557.99	27.75	5,585.74	1,616.24	3,969.50
	Tahoe.....				26.60		26.60		26.60
	Tolyabe.....	472.75		520.13	4,119.10	2.00	5,113.98	1,186.67	3,927.41
	Toiyama.....	4,388.70		887.36	1,244.20		6,520.26	2,015.28	4,504.98
	Total for Nevada.....	5,201.20		2,557.69	17,411.79	42.55	25,213.23	6,901.42	18,311.81
New Mexico.....	Big Burros.....	1,052.90		226.40	2,929.60	4.00	4,212.90	270.00	3,942.90
	Gallinas.....	995.00		283.43	1,447.00		2,725.43		2,725.43
	Gila (north).....	762.50			8,117.10	25.60	8,905.20	12.80	8,892.40
	Gila (south).....	8,901.34		323.95	12,479.02	180.95	21,885.23	804.85	21,080.41
	Guadalupe.....	260.60		9.50	2,751.10	109.80	3,131.00	12.00	3,119.00
	Jemez.....	6,568.60		12.80	18,025.02	92.25	24,698.67	176.91	24,521.76
	Lincoln.....	938.79	141.25	81.12	5,848.10	175.40	7,184.66	475.87	6,708.79
	Magdalena.....	44.91		131.20	1,853.34		2,029.45	14.00	2,015.45
	Manzano.....	548.12		130.02	5,593.26	6.50	6,077.70	90.35	5,987.35
	Pecos River.....	2,213.80		6.90	790.21	22.20	3,033.21	50.50	2,982.71
	Peloncillo.....	80.60			1,858.95		1,428.95	12.80	1,426.15
	Sacramento.....	388.87		2,180.88	6,578.80	135.25	9,283.80	6.45	9,277.35
	San Mateo.....	4,924.20		9.53	3,031.08	8.00	7,972.81	567.12	7,405.69
	Taos.....	350.00	14.70		1,850.40	2.00	1,717.10	6.00	1,711.10
	Total for New Mexico.....	28,029.63	155.95	3,395.73	71,952.98	721.85	104,296.14	2,439.65	101,856.49
Oklahoma.....	Wichita.....	195.90			2,090.70	21.34	2,217.94		2,217.94
Oregon.....	Ashland.....	118.00			498.47		616.47		616.47
	Blue Mountains (east).....	1,408.92	1,037.71	89.38	16,769.80	345.00	19,650.81	395.12	19,255.69
	Blue Mountains (west).....	436.64	7.95	69.25	15,112.39	43.80	15,670.03	194.34	15,475.69
	Blue Mountains (Malheur).....	70.00		325.38	12,538.77	2.50	12,936.65	7.22	12,929.43
	Bull Run.....								
	Cascade (north).....	1,321.93	1,215.12	59.20	6,315.20	170.50	9,081.95	240.00	8,841.95
	Cascade (Willamette).....				3,520.60	25.00	3,545.60	50.00	3,495.60
	Cascade (Umpqua).....	83.00	9.20	102.60	2,266.41	140.50	2,601.11	127.00	2,474.11
	Cascade (Mazama).....	50.24	1,099.16		724.35	5.00	1,878.75	60.00	1,818.75
	Coquille.....				28.75		28.75		28.75
	Fremont.....	1,115.95			3,585.10	33.00	4,734.05	26.25	4,707.80
	Goose Lake.....	139.07			10,897.58	64.69	11,101.34	91.75	11,009.59
	Heppner.....			204.00	11,780.19	52.00	12,036.19	127.25	11,908.94
	Imnaha.....	775.28		1,167.08	25,024.00	5.00	26,971.36	35.00	26,936.36
	Siskiyou.....	310.75		1,346.74	487.36		2,144.85		2,144.85
	Tillamook.....								
	Umpqua.....				26.95		26.95		26.95
	Wenaha.....	66.25			7,466.29	50.00	7,582.54		7,582.54
	Total for Oregon.....	5,896.03	3,329.14	3,363.63	117,042.21	936.99	130,008.00	1,353.93	129,254.07
Porto Rico.....	Laquillo.....								
South Dakota.....	Black Hills.....	25,996.18		2,215.26	4,050.93	816.89	33,079.26	455.66	32,623.60
	Cave Hills.....	120.75		56.25	214.85	67.00	458.85		458.85
	Short Pine.....	14.50			221.35	36.60	272.45		272.45
	Slim Buttes.....				399.75	96.75	496.50	25.00	471.50
	Total for South Dakota.....	26,131.43		2,271.51	4,886.88	1,017.24	34,307.06	480.66	33,826.40

REPORT OF THE FOREST SERVICE.

Classified and detailed statement of receipts during the fiscal year ended June 30, 1908 (34 Statutes, p. 1282)—Continued.

Forest Service—Continued.

State.	Name of National Forest.	Timber sales.	Timber settlement.	Timber trespass.	Grazing.	Special uses.	Gross receipts.	Refunds.	Net receipts.
Utah.....	Aquarius.....	\$500.25			\$7,405.75	\$32.50	\$7,938.50	\$26.00	\$7,912.50
	Bear River.....	1,225.97		\$8.15	4,253.54	19.00	5,538.66	445.70	5,092.96
	Beaver.....	1,217.50			3,576.91		4,794.41	11.00	4,783.41
	Dixie.....	261.00			1,638.66	16.50	1,916.16	2.00	1,914.16
	Fillmore.....	977.70		95.50	4,498.94		5,572.14	.69	5,571.45
	Fish Lake.....	300.00			7,260.91		7,560.91		7,560.91
	Glenwood.....	1,554.25			1,665.02	6.00	3,225.27	8.23	3,217.04
	Grantsville.....	37.50			744.90	10.00	792.40		792.40
	La Sal.....	150.00			2,323.39	28.75	2,502.14		2,502.14
	Manti.....	6,426.87			23,985.66	19.00	30,431.53	52.39	30,379.14
	Monticello.....	200.00			7,186.35		7,386.35		7,386.35
	Payson.....	25.50			2,832.60	12.50	2,870.60	9.55	2,861.05
	Raft River.....	60.00			2,109.93		2,169.93		2,169.93
	Salt Lake.....	236.25			189.20	336.30	761.75	150.00	611.75
	Sevier.....	1,183.17			10,967.93	20.00	12,171.10	12.96	12,158.14
	Uinta.....	7,042.39		12.50	36,020.82	10.00	43,085.71	7,004.43 a 5,348.07	30,733.21
	Vernon.....				474.85		474.85		474.85
	Wasatch.....	370.97		4.00	2,067.74	40.00	2,482.71		2,482.71
	Total for Utah.....	21,769.32		120.15	119,235.10	550.55	141,675.12	13,071.02	128,604.10
Washington.....	Colville.....	441.00		295.57	1,187.00	10.00	1,933.57	.45	1,933.12
	Olympic.....	2,586.00	\$50.00		9.95	235.00	2,880.95		2,880.95
	Priest River.....	25,000.00			1.00	11.00	25,012.00		25,012.00
	Rainier.....	4,006.30	125.83	91.45	6,292.30	169.50	10,685.43	142.25	10,543.18
	Washington (Chelan division).....	2,057.63		71.81	2,646.97	56.00	4,832.41	35.87	4,796.54
	Washington (West).....	16,175.70	19.58	13.48		98.00	16,306.68	6,585.60	9,721.08
	Washington (Wenatchee division).....	12.50	1,838.86	1,477.80	8,913.10	105.00	12,347.26	15.75	12,331.51
	Wenaha.....	157.30			4,755.48		4,912.78		4,912.78
	Total for Washington.....	50,436.43	2,034.24	1,950.11	23,805.80	684.50	78,911.08	6,779.92	72,131.16
Wyoming.....	Big Horn.....	32,053.52			12,902.21	70.25	45,025.98	168.10	44,857.88
	Caribou.....	46.25			2,002.90	24.00	2,073.15		2,073.15
	Crow Creek.....				693.00		693.00		693.00
	Medicine Bow (Wyoming division).....	48,450.00		196.06	6,362.45		55,008.51	50.00	54,958.51
	Sierra Madre.....	8,392.33			16,750.22	40.00	25,182.55	44.02	25,138.53
	Sundance.....	136.85		39.00	1,151.85		1,327.70	.75	1,326.95
	Yellowstone (Shoshone division).....	77.76			6,812.90	237.75	7,128.41	175.30	6,953.11
	Yellowstone (Teton division).....	1,937.68			16,941.93	67.50	18,947.11	40.79	18,906.32
	Yellowstone (Wind River division).....	3,169.25		30.00	7,449.80	53.00	10,702.05		10,702.05
	Total for Wyoming.....	94,263.64		265.06	71,067.26	492.50	166,088.46	478.96	165,609.50
Grand total.....		773,182.33	20,439.15	55,405.76	962,829.40	30,425.23	1,842,281.87	54,026.68	1,788,255.19

a Uinta Indians.

It is estimated that the receipts for the fiscal year 1909 will be not less than \$2,500,000.

